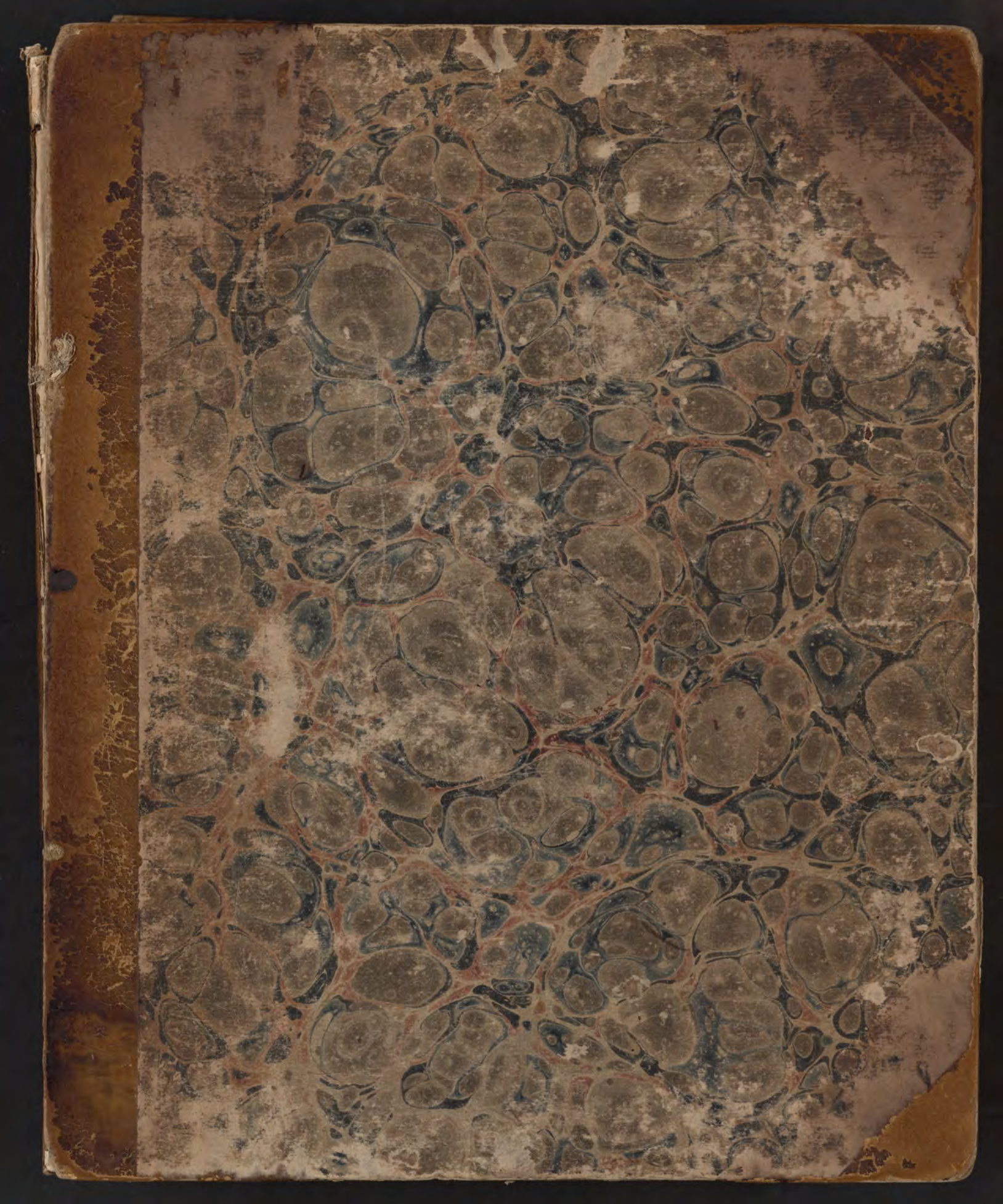

EX BIBLIOTHECA.

F. JULII LE MOYNE, M. D.

No. 40

Lege et Disce.

These notes were taken by
Dr. F. Julius LeMoyne at the University
of Pennsylvania during 1822-'23,
and given to me in 1879 - and
greatly treasured by me -
I take great pleasure in giving
this volume to you, his great
grandson, & hope it will give
you pleasure - It is wonderfully
concise & beautifully written

Wm LeMoyne Wills
Los Angeles
2-20-27

To Dr. Valentine L. Ellicott
Baltimore

May 28, 1977

At the suggestion of Dr. F. Tremaine Billings, of Nashville, Tenn., a Fellow of the College of Physicians of Philadelphia and, like me, a great grandson of Dr. F. Julius LeMoyne, I am giving this book to the College of Physicians to be added to the College's valuable resource materials. I am also giving his medical school lecture tickets and his book of prescriptions.

Valcourtlon LeMoyne Ellicott, M.D., Dr. P.H.
22 Buchanan Road
Baltimore, Md. 21212

Troy Jr, 1921

At the suggestion of Dr. F.
Thomas Gilroy, of Nashville, Tenn.,
a fellow of the College of Physicians
of Philadelphia and, like me, a
great admirer of Dr. F. Gulick of Troy,
I am giving the book to the College
of Physicians to be added to its College
valuable museum material. I am
also giving his medical school lecture
ticket and his card of graduation.

Wolcott Gibbs Gilbert M.D., Dr. P.H.
22 Gundry Road
Baltimore, Md. 21212

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On Inflammation

There is perhaps nothing more necessary to the Surgeon than a knowledge of the principles of Inflammation for as there is a certain degree of it which is necessary to restore diseased parts to their healthy state so there is likewise other grades incapable of performing this restoration; of course, therefore a knowledge of its principles and also the appearances which it has in performing this restoration of diseased parts, is absolutely necessary for the surgeon to attend it.

The term of inflammation was given to this process from the supposition of an accumulation of fire in the part inflammed but this idea is altogether incorrect, but the term answers our idea of than particular appearance

it may be connected with another disease or not; an instance of the former we see in Scrophula, syphillis & frequently improper treatment is the result of ignorance of the symptoms which violent inflammation leaves behind it.

Inflamation terminate 1st by resolution 2d Effusion 3d adhesion 4 Suppuration 5 Ulceration 6 Granulation 7 Cicitrisation 8th Mortification —

Inflamation in cavities lined with serous membranes most fequently terminate either by adhesion or effusion this is a wise provision of nature as it limits the extent of inflamation —

When it occurs in mucous membranes it almost always terminates in suppuration — this is also a very wise provision — for if mucous membranes such as the lining of intestines, esophagus — Urethra &c were liable to take on the adhesive state these canals would be obliterated & their functions destroyed which would be fatal —

It has two stages — the cold & the hot stage

The tendency of a part to inflame is generally in a direct ratio to its vascularity & the pain is in proportion to the nervous structure of the part — exists in bones theca, & tendons —

for instance I know a case of sprained ankle which after inflam=mation abated was very weak, medical assistance was called, and the Physician prescribed some medicines which threw the patient into an hectic fever

An inflamed part performs its functions with difficulty, an instance of this we see in the Eye which when violently inflam=med loose the power of vision

Inflammation is of three kinds; adhesive, suppurative and ulcerative. I shall only treat of the healthy kind in this lecture Inflammation is not necessarily a disease, because disease always tend to a dissolution of the parts; but inflammation is sometimes necessary for its restoration

In a healthy state it is of a pale red colour accompa=nied with preternatural sensations; if seated in the skin, very often preceded by itching; heat, and dull throbbing pain, accompanies it. weakness is never a disease though often a predis=posing cause of it. The causes of inflammation are chemical mechanical and fever. of the first are heat, cold, acrid, sub=stances, caustics, &c of the second are wounds, bruises, pressure &c

Inflammation does not immediately follow the application of its cause: the space of 24 hours sometimes intervening a cause that will at one time excite an inflamation of one kind, will at another time in the same constitution excite a different one. different remote causes have been supposed to excite different kinds of inflammation. but I think the variety is owing to a difference in situation of the affected part, for the same remote cause will produce erysipelas in the face and common inflammation in other parts, fever is sometimes the remote cause

Inflammation depends greatly on habit. E.g. a person unaccustomed to work will blister his hand very soon; and a person unaccustomed to a high degree of heat, will bear much less, without injury, than one exposed daily to it. if suppuration follows inflamma=tion it is termed a abcess or ulcer.

the healthy kind of Inflamation are adhesive & suppura=tive. an adhesive inflamation is an increased action of the vessels causing an extravasation of the coagulating lymph. it begins in the small vessels and spread from a point in which for the most part it begins.

Suppurative inflammation is an increased action of the vessels secreating pus. in adhesive inflammation the matter which forms the union is coagulating lymph. the red globules are thrown out likewise but are again absorbed

Inflammations does not immediately follow the application of the cause. The space of 24 hours intervening is found that will of one kind operate in inflammations of one kind, will at another time in the same constitutions operate a different one. Different causes have been supposed to operate different kinds of inflammations. And that the variety is owing to a difference in situations of the affected part, for the same causes will produce very popular in the place one common inflammation in other parts, yet in constitution the remote causes.

Inflammations depend upon the habit. 2d. a person unaccustomed to work will blister from every loss; and a person unaccustomed to a single degree of heat, will bear much more without suffering, than one supposed ability to it. 3d. suppuration follows inflammation in tissues a Ulcer or sores.

The healthy kind of inflammations are attended by tumefaction. An adhesive inflammation is an increased action of the vessels constituting the organs of the secretion of the white substance, the tumor is occasioned by the red globules are thrown out following and are again absorbed.

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When inflammation supervenes in a particular part, that part receives a more copious flow of blood through it, than an healthy part in consequence of an increased action of the blood vessels. That there is an increased action is proven by the part being of a pale red colour. The diameter of the vessels are likewise increased which is proven by Mr John Hunter experiments on ears of a Rabbit. The swelling in inflammation arise both from the thickening of the coats of the vessels and from the extravasation of Lymph. The swelling is greatest at the point of which infl. = ammation commences. The pain is produced by the spasms or the convulsive action of the vessels much in the same manner as it is in the cramp or tetanus or by distention, when inflam = mation proceeds gangrene, it is of a purple colour, the heat of an inflamed part is considerably increased but never rises higher than the source of circulation. The Lymph secreted in adhesive inflammation becomes in time vascular and may be injected. Mr Hunter proved that coagulating lymph was thrown out, by observing that the matter thrown out on the surface of the inflammed cavities, corresponded in every particular with the lymph of the Blood when sepa = rated from the serum and red Globules. The coagulating lymph is changed in passing through the vessels; for if be thrown out on the internal surface of a vein it refuses to unjo

If then an Inflammation happens in a particular part, that part becomes a more copious flow of blood through it, then on healthy parts or contiguous to an increased action of the blood vessels, that there is an increased action is proved by the heat being of a pale red colour. The diameter of the vessels are likewise increased which is proved by pale white throbbing of pulses on part of a health. The swelling in inflammation arises both from the thickening of the coats of the vessels and from the extravasation of lymph. The swelling is placed at the point of which inflammation commences. The pain is produced by the pressure of the distending action of the vessels upon the nerves, or by distension, when inflammation proceeds, pus, it is of a purple colour, the heat of an inflamed part is considerably increased but never rises higher than the degree of circulation. The redness arises in adhesive inflammation arises in three manners, continuous, by injected. The throbbing proceeds from coagulating lymph from thickening and by observing when the pulse then throbs out on the displacement of the inflammed arteries, corresponding in every particular with the frequency of the blood when expelled from the heart and read by pulses. The coagulating lymph is changed in passing through the vessels; until it flows out on the internal surfaces of a vein it gives to any

with the coagulating mass. the effect of adhesive inflammation on the constitution vary according to the degree of violence and part affected. it is attended with little inconvenience when seated in the skin but in the theca of the tendon or in the periosteum, it occasion great pains and if the inflammation be great it produces symptomatic fever. the pulse in this case is full hard and quick the Blood drawn is sizy. this inflammation often terminates spontaneously; in which case it is called spontaneously resolution or adhesive. a man 36 years of age received a bruise on the leg by falling on a bar of iron upon it. Six days before inflammation came on. I was called to see him; his body was all in a tremor, his pulse small and quick, his strength much diminished. he was cured by a dose of Laudanum and the application of it to the part affected. I have seen death produced in this way - by the inflammation occasioned by lacerated wounds of the joints.

Tumors frequently occur in the breast of women, and likewise in the throat, called Scirrus tonsils and are produced first by the effect of simple inflammation and second by the lymph not being absorbed when the inflammatory action ceased. this takes place in glandular swelling and forms what it is called a Schirrous tumour. by this it appears than there is no cancerous tendency in the blood. inflammation terminates also by the secretion of serum. if there be a secretion of any fluid from the part inflamed, the inflammation does not run so high

as it otherwise would do. Blisters that run well are much easier cured than those that do not.

it is highly probable that inflammation of the Brain terminates in what is called Hydrocephalus internus, and of the Chest by forming hydrothorax. Local Inflammations are frequently cured or removed by fever. Hemorrhagy sometimes terminates in inflammation. a remarkable instance of Inflammation of the Eye which resisted blood letting and other remedies, was cured by the accidental braking of an artery in the Eyelid, which bleed considerably. I have seen an incurable case of fistula in ano, from not bleeding in the inflammatory state. if Inflammation be not stoped by some of those means it proceed to suppuration. When inflammation happens from accident and proceed too far, we should attempt resolution in general. but there are cases in which resolution should not be attempted. as first in very warm weather, least we induce tetanus, a generous diet and cordial drink should rather be recommended 2d if occasioned by a constitutional disease; a fever 3d if it be owing to the removal of any worse disease. When it occurs in an important part resolution should always be attempted.

Some inflammation is necessary for the resolution of the Part

In order to effect a cure, in the first place the remote cause if any extreneous substance, it should be removed

2d reduce the inflammatory action, that the part may take on a natural one; this is effected by two kinds of remedies constitutional and local.

The constitutional, are low diet, bleeding, purging neutral salts, antimonial, diluents, Tamarind water &c. low diet tends to empty the blood vessels. Blood letting is the most powerfull remedy inflammation, since inflammed vessel are under the necessity of contracting, to adopt themselves to the collumn of blood; and as contraction is a very different action from inflam-mation it always obs the part to take on, a natural action by drawing them from the inflammatory one. Blood letting acts in two ways, first it remove the stimulants of distention by lessening the volume of the blood itself. on the third general remedy Purging, this also acts by lessening the action of the vessels; except when they produce nausea; then they act sympathetically though we are obliged sometimes to omit it on account of the inconvenience attending it. Nitre, Sal Ammoniac Glaubers salts have been advised, antimonials have sometimes

been joined with them. Mercury often acts powerfully in the cure of inflammation. 4th rest, this is highly serviceable, the whole body should be kept quiet still and the room of a moderate temperature.

Local remedies are first, Bleeding by scarification, leeches and cups. if a fever be the cause of inflammation, general blood letting should always be premised 2d Cold - this should only be used when the heat of the part is disagreable and should never be carried so far as to become disagreable to the patient; Else it prove injurious by acting as a stimulus. 3d Vinegar sal ammoniac, preparations of lead with or without Laudanum alone. 4th Poultices; these are either simple or medical simple as bread and milk, the flax seeds poultice &c the medical are the simple poultice imped with the medicines above mentioned. Particularly serviceable in inflammation arising from punctured wounds 5th Blisters. they are of very great use applied directly over the inflammed part or in its vicinity. they should be used when you are fearful of two great evacuations, they produce resolutions by the evacuation of the serum. Blisters are of use applied to an inflammed part when we are fearfull of tetanus. of the good effects of adhesive inflammation there are instances

1st in the healing of wounds

of the act, he imputed the inflammation to the action of the air I once tried an experiment on a cat in this manner, I made an incision through the pleura, through which I passed a tube and filled one side of the chest with air, I then withdrew the tube and closed up the wound. in this situation it remained three days without any remarkable alteration, it was then suffocated and upon examination no possible difference could be observed between the two sides. I mention this to shew than the effect of air is not so noxious as is often supposed and to prevent surgeons from hurrying too much in closing up a wound with a view of keeping the air from its internal surface.

When adhesive inflammation will not admit of resolution, it go into the suppurative stage, this is characterised by an increase of pains often attended with a throbbing and shooting sensation: the swelling enlarges, the part becomes softer and at length a fluctuation is felt: there is also at the same time, an alteration in the colour of the tumor from a deeper to paler, also rather a yellowish appearance in the most prominent part of the tumor: it is now what may be called an abcess or circumscribed tumor containing pus.

abcess are often attended with rigours which are succeeded by fever and clammy sweats which symptoms are removed by evacuating the pus. if the pains be very great it may be relieved by opium; this will be best effected by combining opium with

of the air, be manifested by thermometers to the water of the sea. Among these are experiments on a cat in the usual manner, which are to convey through the veins, through which of powerful tubes are filled one filled with other with air, & then withdrawn the tubes are closed up the wound. In the situations of consumptive persons invitations only remarkable alterations, & upon these suppositions are possible differences could be observed between the two sides. I mention this to show that the effect of air is not so very new as is often supposed and to prevent strangers from supposing the world is closing up or turned into a sort of keeping the air from the internal days.

When observers by thermometers shall have found of variations, it go into the experiments always, this is characterized by an increase of heat often attended with a shudder and shivering sensations. The shudder enlarges, the heat becomes dizzy and at length a lunatic is fall: there is also at the same time, an alteration in the colour of the tumor from a deeper to paler also exhibiting a yellowish appearance in the most prominent part of the tumor. This now is then may be called an edema or consumptive tumor containing pus.

Edema are often attended with pains which are increased by pressure and always most which, sometimes are accompanied by convulsions. But pus of the pains be very great it seems to relieve by opium. The skin are also affected by convulsive opinions with

small doses of Emetics. a poultice of bread & milk is usually applied to the tumor, in which prominent part is observable and here an opening is in general naturally made by an absorbtion of the part beneath the skin.

However an opening is sometimes made by the skin loosing a tenacity and slough away: when this takes place it generally make a pretty large opening

1st if the time of this natural opening be protacted too long it becomes necessary to make an artificial one. Several circumstances requires this opening to be made early

1st if the abces be situated on the thoray or abdomen

2d if situated on any of the Joints

3 if attended with great pains as in paronychia

The pain in Paronychia may be almost removed by Opium in suppuration attended with hectic fever the constitution sympathises with the local irritation with the power of the constitution is unable to overcome and when the fever is brought on by ulcers or the affection of the tendons or the ligaments or of any of the vital parts. here the symptoms of hectic are great lassitude, weakness loss of appetite, cold night sweats, aptness to sweat on very little exertion, the pulse small quick & frequent urine high coloured and frequently terminates in diarrhoea

The process of suppuration sometimes suddenly stops and the matter already formed is absorbed, this is a happy

Small Cases of Gastritis. a pavilion of Cases of milk is usually applied to the tumor, in which permanent pain is observable and has an opening is in general naturally made by an absorption of the part beneath the skin.

Thereof an opening is downwards made by the skin leaving a transverse cut flesh open: when the tube takes it generally made a pretty large opening

1st If the tube of the natural opening be protected too long it becomes necessary to make an artificial one. Several circumstances require this opening to be made early

1st If the ulcer be situated on the Bottom of abdomen

2d If situated on any of the chest.

3 If attended with great pain or in paralytic

The pain in paralytic may be almost measured by giving an injection without with Health have the constitutions appetites with the local indication with the feeling of the constitution is unable to recover and when the fever is brought on when or the effusion of the tumors or the by consent of any of the vital part. here the dysentery of health are quite positive, protrusion of a part is only induced, when to treat or very little expectation the pulse small quick & frequent urine high coloured and frequently scanty in discharges the process of suppuration abundant and gradually left and that matter already formed is absorbed, the is a happy

termination; and of course a desirable thing to find medicines which will produce this effect

Accordingly many medecines have been employed for this purpose, emetics & nauseating medicines have been known to produce this effect. the matter found in buboes have been absorbed by vomiting produced at sea. I have observed bleeding blistering and purging to be of service. Hectic fever instead of being induced by suppuration as it is frequently supposed is sometimes cured by its promotion; one instances of this kind occur in amputation of the leg. When the patient was affected with Hectic fever from a diseased joint. with ceased after the amputation when the surface and quantity of matter was increased again hectic fever has been cured by Blister which increased the Pus, there are convincing proofs that hectic fever is not the consequence of absorption of Pus.

If suppuration proceeds to fluctuation so that it may be distinctly felt, the opening should be assisted by making an incision in the abcess. it is very customary to apply plaster of different kinds to assist in breaking the tumors containing pus, such as raisins, saccharine substances &c scarce any of these do any good though that applied next preceeding the eruption, generally obtain the credit of accelerating the discharge. I believe they act merely by softening the part. blisters promote absorption, by irritation, abcess

on the cranium should never be left to open themselves
Such as impeded respiration should be immediately opened, the
tonsils are so enlarged by suppuration than the impede the
respiration, they should always be opened under such cir
cumstances. Matter does not always ~~be opened~~ absorb towards
the skin. I.E. in tumours containing pus absorption does
not always take place between it, and the surface of body
but sometimes make its way internally. hence the necessity of
opening abcesses when they form over joints or over other
cavities. I know a patient affected with a periodical pain
in the head which afterwards was found to be owing to an
abcess in the calf of the leg, upon opening which, the pain
ceased.

I have twice known all the symptoms of nervous
fever produce by small abcess on the abdominal ring.
in the first case the patient died owing to the ignorance
of the cause of the disease.
in the second the abcess was opened and the patient recove
=red. I have know another similar instance of one situa
=ted in the axilla. abcesses in the face should be opened
soon to prevent the scar that would issue by leaving it
to open spontaneously as it would absorb much more
of the part.

There are two way of opening abcess.

1st by incision

2d. by producing Eschar by means of Caustic, the first should be preferred unless where the timidity of the patient prevent it; in which case a thin layer of Lapis Septicus, may be applied for the space of 8 or 10 minutes. the part it touches will soon slough off and give vent for the matter or pus. after the pus is discharged, it is to be treated in the same manner as an ulcer

Pus is a light straw coloured fluid and the consistance of cream, containing a number of globules; it does not coagulate by heat if exposed to it but evaporate to dryness it does not readily putrify, it is specifically heavier than water and is easily miscable with it, it is no corrosive, it is said to be of a sweetish taste, it is distinguished from the other fluids of the body by its containing globules, only the sal ammoniac which is not the case with any other animal fluids. Mr Hunter has observed that it is a reaction of the vessels taking on the nature of glands and than the globules are not formed till after it is thrown out of the vessels when particular suppuration should be obviated by resolution.

Ulcerations take place mostly after suppuration; and suppura=tion takes place after the extraction of dead ulceration.

in ulcerative inflammation a part is always lost this is removed by absorption. it commence mostly after the suppurative stage, but has been known to proceed it as in case of Chancer and in some particular irritations or where sudden death of a part has taken place

Pressure has produced this stage without suppuration of than part of the body ulcerates sooner which is nearest of the surface.

the absorption of the parts in ulcers is always attended with pain and inflammation which is called soreness. but this is not a neces=sary symptom of inflammation for we find than Schrophulus ulcers are not painfull when the proceeds slowly, but when rapid they are attended with great pains. I shall now say a few words on abcess.

Remarkable instances of ulceration attended with inflamma=tion occurs in Mammary abcesses in women. they may either be seated in the glandular part or on the cellular membranes, it seldom occupies the whole breast. if a part of the glandular structure be diseased, the secretion of milk is commonly diminish=ed, but if the whole of the breast is affected the milk is

suspended altogether.. it is attended with a shooting pain that extends to the axilla. If the abcess be seated in the cellular texture, the secretion of milk is not much impeded they are mostly preceded by a chill fit accompanied with pain of the affected part. There is some times more than one tumor felt. the time when this disease mostly prevails is the third or fourth month after delivery. those women are always subject to them when they suckle. these cases we seldom or never see until the arrives at a considerable degree of soreness. owing to the women supposing her-self quite competent of the cure, though the always fail in the attempt although suppuration is mostly the result of inflammation of the breast yet I have seen terminate in œdema, and the swelling to be so great as to protude the parts around the nipple so as to hide it. the swelling dot not come untill ten days and I was not called in for six weeks. When the adhesive inflammation takes place, the coagu-lating lymph is sometimes thrown out without being again absor-bed after the inflammation has subsided. this form an indurated Schirrous. I have seen them of various sizes they are no way cancerous, because they have yelded to the antiphlogistic regimen. these affections are frequently owing to mechanical causes, as tight Dress &c and by over straining the vessels by long dis-tension by milk. they are sometimes produced by the persons taking cold. in those cases where the glands are indurated they seldom return to their former size. sometimes the glands are very much reduced in size and never secrete milk

If called in the forming state bleeding according to the strength of the Patient, Exhibit a mercurial purge and put the Patient under a strict vegetable diet. The breast may be anointed with warm oil, if it be convenient for the patient to be confined it should be done; if not support the breast by passing an Handkerchief round the neck. if inflammation continues venesection may be repeated, and the application of Leeches to the part will be found of great utility. Bread & milk poultices with lead water are highly serviceable after evacuations have been premised. If they do not give relief and the inflammation continues a blister should be applied. a great variety of plasters have been used and often recommended, but I believe they are of doubtful efficacy. The blister is not so painful as might be expected; women who have not enjoyed rest for many nights before, have been known to sleep sound when it was operating. but be sure to keep up the evacuations per anum. an application of sal ammoniac and vinegar is frequently advised. it is however of no use, suppuration seldom takes place if properly treated from the commencement of the disease but sometimes from delay in calling in a physician or from his ignorance it does occurs. if it becomes necessary to open the abcess, some Physicians advise to do it by making a large slit, but I prefer making a puncture in the abcess,

and introducing a bougie to keep it open. the bougie must occasionally be drawn to avoid the within fluid or pus collecting to it. in the case of Œdema I apply sal ammoniac, mercurial ointment &c, to the parts and deplete generally by bleeding purging &c but without any effect. the application of a blister remove the complaint. I removed an indurated gland (attended with slow fever which was afterwards cured by blee=ding and the anti-phlogistic regimen.) equal afterward dressed with mercurial ointm.; where the schirrous was as large as the first. Mercurial ointment are good in resolating tumors. Weakness in the joints and especially in the hip joint, without any apparent cause is generally a species of inflammation which may be cured if taken in time by purging. Swellings are occasioned by a secretion or throwing out a coagulable lymph; into the cells of the cellular membrane. vessels which are inflammed carry a coagulating lymph which adheres to their internal coats and becomes vascular.

Paronychia is a violent inflammation, occurring mostly at the end of the fingers which frequently end in suppuration according to the seat of the disease it is attended with trifling or excruciating pains. Paronychia may be divided into four kinds

1st when seated in the Cutis vera

2 in the adepose Membrane, here the pains is much greater and matter is frequently effused under the nails. the whole finger becomes swelled and painfull

3 in the theca of the tendons

4 in the periosteum.. in the last case the pains is very great though without swelling at first. When it takes place in the adhesive Membrane, there is no danger of Mortification taking place, the matter found in those two last case, of paronychia has sometimes passed along the course of the tendons, under the Ligaments of the wrist and formed a tumor at the lower part of the fore arm. the bone often become carious and sometimes the tendon slough away

I have seen mortification from this cause. it is a difficult matter to point the cause of a whitlow. I have seen it produced by the bite of rabid animal.

Consider in a certain inflammation, arising really or the use of the lungs which frequently and in dyspnoea. Concerning to the head of the disease, it is attended with trifling or no circumstances. Observations may be divided into four heads.

1st When treated in the early stage.

2 In the advanced illustrations, here the pain in small vessels and weather is frequently offered under the head. The which usually becomes swelled and painful.

3 In the three of the tendons.

4 In the persistent. In the last case the pain is generally through inflammatory swelling of joint. When it takes place in the all other muscles, there is no danger of Mortification taking place, the least fever of in these two la cases of paroxysms has sometimes passed along the course of the tendons, under the disappearance of the wrist and formed a tumor at the lower part of the forearm. The bones often become carious and sometimes the tendon alone sloughs.

5 Has been mortification from the cause. It is difficult matter to provoke the cause of inflation. Often arises is produced by the bite of dog and animal.

In the cure little attention is to be paid to the first kind, it may be opened and dressed with unguentum or simple poultice containing Saccharum Saturni.

When it is situated deeper than the skin make an incision down to it. and if any part of the bone is decayed it ought immediatly if possible be taken away, the dressing may be either dry lint or a poultice. boiling water has been advised in cases of paronychia. I believe when it is of any use it acts as a rubefacient. nothing else however than opening is necessary, if matter has passed along the tendons up to the wrist it should be let out at the most projecting parts. sometimes the orifice is small grown up with the fungus and prevent it healing: for destroying the excrescence exfoliation will be found tedious and often in vain. it should be removed by enlarging the incision.

Psoas Abces

This disease is seated in the cellular membrane under the Psoas muscle where matter is deposited in a cist of the cellular substance, any of the remote causes of inflammation may produce this disease. at its progress to the surface of the body it generally follows its course down along the bones, generally it causes pain in the lumbar region, but sometimes goes off without any pains for three months. the thigh on the side affected is weak the patient cannot well stand, he generally bends the body to relieve the muscle on the side affected, he cannot well rotate the thigh and his affected with rigors. it sometimes happens than Months elapse before any one mark of it can be seen its situation is anteriorly. it is most the same allways it sometimes comes on the loins and I have seen it on the buttocks. sometimes the tumor is on lower part of the thigh sometimes on the upper. the integuments are discoloured the tumor is most tense when the patient stands upwright. when lying down it is soft & flaccid. if pressure be made on the abdomen it will be flattened and be more protruded and vice versa laughing or coughing renders it more tense the fluctuation may be easily felt, these abces never open forwards into the cavity of the abdomen

but have sometimes destroyed the side of the contiguous vessels and thereby produced fatal Hemorrhagea. if they continue a long time they may occasion a carrie of the vertebra, where it protudes at the upper part of the thigh it appears like hernia it has also been confounded with fistula in ano.

Treatment

If we are called to see the patient soon we must keep him at rest and must avoid all animal food. bleeding, scarifications on the back leeches are also of service. Purges and cause the Patient to lay on his back. a little blister should likewise be applied to the upper part of the tumor. Issues on the loins when the tumor has formed externally it has been disputed whether the tumor or abcess should be opened or not and some Authors think there is danger in making an opening into the Cavity, but when it is long in opening it put the patients life in danger if left to open itself. Mr Hunter has observed than all Cavities will inflame if opened unless they unite by the first intention. he observe than the inflammation would attact every side of the Cavity. which is the cause of the other symptoms which follows..

Mr Aberni (has taken the Idea from Mr Hunter no doubt) has proposed to open it. so than

the sides of the wound may unite by the first intention. he has proposed to perform the operation with a lancet, the puncture to be made in a longitudinale direction of the fibres, first to make an incision through the skin and then to push the lancet obliquely through into the abcess by which means we make a vascular opening. we should use no probe or any such thing to ascertain the depth of the sinus because they would irritate the parts. When the matter is discharged bring the edges together with adherive plaster. after the matter is discharged a few times in this way in that way it may be opened with a lancet freely without any danger as the sides of the sides of the cavity will be brought together and so close as to be inflam=med. this is the best methode of treating the abcess. I have tried this method myself and find it to answer very well. although I have never been able to succeed in effecting a cure, because all the cases I have seen have been atten=ded with a carious of the vertebres. However unfortunately does not always unite by the first intention and when it does not happen the inflammation which was spoken of before and which is the fatal cause comes on (here the Doctor relates a case) beside the different inflammation before spoken of there are other and first.

Of Erresipelas

This is a inflammation of the Cutis vera. it sometimes begin in the fore arm and spread, over the whole body. This is frequently succeeded by chiverings, which is succeeded by a hot fit. the skin is of a light yellow in some case and dark in other. if you press it with your fingers the colour disappears, but on removing the pressure the colour returns. the pain is of a burning kind, the inflammation is much diffused frequently spreading in one part while it subsides in another. situated in the face it is attended with itching

Erresipelatous Inflamation differes from the adhesive inflam=mation, in which coagulating Lymph is thrown out but in the former (erresipelatous) serum is thrown out, frequently in cells which form blister on the surface of the body. Sometimes the serum escapes into the cellular membrane forming a tumor which fill like a ganglous suppuration, sometimes supervene running from cell to cell in the adepose membrane causing death. When mor=tification take place in the cellular membrane it is discharged in flakes likewise and is very offensive

this is mostly the case when it is situated above the arm. Erresipelas generally terminates in about ten or twelve days.

Of Transpiration

This is an insensible evaporation of the fluids passing in the form of vapour from the whole body. It is frequently accompanied by chlorosis, which is distinguished by a hot skin, of a rapid pulse in some cases and dark in other. Sleep with open fingers the colour disappears, but on measuring the pulse colour returns. The form is of a burning kind. The insensible transpiration is much affected by sensibility. It is greatly increased in hysteria, in which coagulating coagula are found on the formed (coagulations) tissues are found, frequently in cells formed on the surfaces of the body. Sometimes the serum passes into the cellular membranes forming a tumor which pits on a dropsical suppuration, sometimes the serum burning from cell in the adjacent membranes causing death. Hysteria - hysteria takes place in the cellular membranes in extravasation (also hæmorrhage and is very dangerous)

This is usually the case when it is situated above the diaphragm generally terminate in about two or three days.

Causes The remote cause are so similar to those that excite common inflammation than I shall not enumerate them it sometimes comes on spontaneously or without any appearances of causes

In England bark is the cure. the cure is much the same as in common inflammation. it may generally be removed by attend=ing to the antiphlogistics regimen, before suppuration take place but when suppuration supervene it must be opened early to prevent it escape into the cellular membrane. poultices before suppuration take place are improper.

Rye flour sprinkled on the part affords ease. the appli=cation of a blister in such a way that it shall be partly on the sound and partly on the inflamed part is of great service. When the part begin to heal an exconiation of the cuticle, like bran is a favorable symptom.

Edema

Edema exist in the skin though it may sometimes be seated deeper. in inflamation water is evacuated. tis probably the same as adhesive inflamation originally taking place in parts dis-posed to dropsy, it is attended with a burning pain.

Treatment

The usual application is brandy or bread and Milk poultices with it or with saccharum Saturni which is more useful than any thing else

Burns

The morbid effect produced by the application of heat differ according to the intensity of it, and the time of its continu-ance. th Effects are

1st When the degree of heat is low a redness only of the part affected takes place

2 vesication causing a separation of the cuticle attended with an effusion of serum.

3 the death of the part forming an eschar by the caustic.

the heat of the burning coal or any of the melted metals will produce this effect sometimes the bones are disloca=ted by heat, and it frequently terminates in death. when the life of the part only is destroyed the patient did not feel any great pain after the first effects are over till three or four days when the inflammatory process takes place for the restoration of the dead part.

I saw a little boy who undertook to walk the walk the edge of a chaldron which was full of boiling water in a soap manufactory, when his foot slipped and he plunged in the midst of it, he was wet nearly two third over and his clothes keep=ing the heat to the part a considerable while he was very much burned. his pulse was scarcely perceptible, his extremities cold and a very heavy drowsiness prevailed. he was very restless and kept constantly changing his position, he spoke not at all ex=cept when asked a question and there he answered very ra=tionally and when interrogated about his feelings he said that he felt no pains. he died in about six hours, when these symptoms are produced by fire, the patient seldom if ever recovers

burns effect old people the most through the proves fatal at times to all ages. a deep burn if it be of small extent or spread but little is but a small injury. but if it be of great extent though very superficial it is extremely

dangerous

When burns happen on the head they occasion inflamma-tion of the Dura mater. burns occasioned by any of the melted metals appear to be of no serious consequence at first, but sometimes the skin and vessels slough off and leave the bones bare, hectic fever come on and amputation is absolutely necessary for the reco-very of the patient

I consider inflamation resulting from burns to be different from all other inflamation. in the first place the pain is of a different kind from than of all or any other inflamation being of a burning kind, not being capable of resolution and causing ulceration of the part underneath which throws up fungous granulation than are very difficultly suppressed. The cicatrices formed by ulcers resulting from burns have a disposition to contract more than other cicatrices not the result of burns causing there by a much greater deformity of the part affected they are cured by totally different remedies as volatile alkali, spirit Mercurial. &c

Treatment

The remedies employed in the cure of burns are very numerous, they are either general or local. most authors advise depletion in burns indiscriminately, but they should not be used unless fever and great inflamation supervene. if the burns be

extensive and the patient very weak he may be supported by bark and wine and even brandy and water. he should have any nourishing aliment he could desire. if the extremities be cold apply sinapism. if from the invigorating plan of treatment inflamation & fever supervene. blood letting and a more spare diet will be necessary.

The local remedies generally advised cool water, soap suds &c Mr Earl in a small treatise recommends &c above all other remedies, vinegar and water this is a good application, lime water &c oil then form a crust like a cuticle and the common people use a scraped potatoes. of late very stimulating applications have been used as volatil salts spirit turpentine &c and latterly Mr Kentish has used the spirit turpentine combined with basilicon & I have used it with very good effect in many cases. The remedies coolers act. the most of these applications are cold water &c act only as palliatives, relieving the pains and soothing the part for a while, but the turpentine and basilicon spread on rags and applied is a permanent application and very usefull, volatil alkal & vinegar are very good applications. I have used vinegar with very good effect. the turpentine and basilicum should be applied only on the inflamed part, for if it be in contact with the sound skin it will cause pains and great inflammation and swelling of the part we frequently not called into cases of burns for several days after they have happened when a number of applications have been tried I have applied turpentine and basilicum when not called for three

or four days after the accident. in one case of a burn of a Child the turpen=tine & basilicum was applied but owing to the superstition of the parents together with the clamour of the old women, it was omitted for three or 4 days without my knowledge, the Child become worse and a fungus arose over the surface of the burn, I was sent for again and the part was sprinkled with burn alum. the turpentine and basilicum was again applied which soon cured the patient.

In the case of a patient who was burned with gun powder this remedy was used the pain left it entirely about 4 hours after the application of the ointment, however he frequently complained of a pain in his little finger which upon examination appeared not to have of any of the ointment on it and on its application to this part the pain quickly ceased and the inflammation subsided and he was soon cured.

Spirit turpentine is one of the best application in these cases.

Inflammed part when in contact are very apt to grow toge=ther so that we should be extremely carefull to keep the dressing between inflammed surfaces which lie in contact with each other when they are suppurating and granulating, otherwise the parts will adhere by the union of the granulation. I know a case where the fingers of one hand adhered to each other in conse=quence of a severe burn. which evinces the necessity of keeping the dressing between each inflammed surface, I know once

a scold upon the parts of the generation of a young man, which for want of proper care to keep the part separate while healing all united together the penis to the scrotum and than to the thigh. the young man did not like such a confined mass and applied to Mr Hunter for relief who under took his case and was fortunate enough in removing it about a couple of inches to the no small satisfaction of the patient.

burnt parts sometimes form a ligature round the limb stopping the circulation of the blood in the part below the ligature and thereby producing mortification. when ever this circumstance take place the band should be cut open.

Of Mortification

Mortification is the certain death or destruction of any part it is of two kinds inflamatory or than produced by inflamotion & debilitative or than produced by languor of the first kind the cause are violent contusions and the application of a violent degree of heat or cold

the cause of the second are the destruction of the circulation of the blood in the part either by pressure or by tying the principal artery. they both operate the same way by cutting of the necessary supply of blood. when a part loose its life by mortification it first become purple, then blue then black. the cuticle soon separate from the other parts bread and milk poultice should be applied to the parts and continued until the parts separates. in cases of violent inflamotion the evacuation should be promoted, and Opium given to relieve the pain. a small degree of inflamotion is salutary, intense cold if not severe enough to kill produces a palenes of the part which is exposed which is succeeded by redness and is attended with a burning sensation and soreness of the parts affected. if the cold is continued it loose its sensibility and at lenght dies. snow or fresh spring water should be applied to the part affected; after which the warmth

of the part should be gradually increased to a comfortable state
mortification often comes on without any apparent causes:

of Mortification produced by inflamation there are two
kind. The first is when the inflammatory action is too great for
the power of the part to support. in the second there is some
=thing peculiar in the nature of the inflamation, so than the
inflamatory action does not seem to produce its distroying effect
by its degree of violence. Wiras by a bungling operator on
the Hydrocele injected into the cellular membrane of the Scrotum
which by being destroyed sloughed and the whole cellular
substance come away with an intolerable fetor. the escape
of urine into the cellular membrane has produced the
same effect

Mortification often takes place in the toes (of
old people specialy) it commences with pain and slight in
=flamation of a purple colour. vesication sometimes takes
places round its edges, but not always, the progress is for
the most part slow, but in some it is rapid and painfull
the upper part of the foot swell and the cuticle became
detached. I have known it arise from the prick of a
Knife in cutting corns. in the cure opium is the best
all the stimulating medicines as Spirit turpentine,
Essential Oil &c should be avoided. never make Scarifi
cations or apply stimulating substances to assist in

in throwing off slough off without any assistance, Blisters should not be applied to this kind of Mortification for what so ever irritates or stimulate the part increase the disease. it has been advised to amputate the diseased toes but this should never be done when the mortification is progressing least it attack the stump and the patient undergoes much unnecessary pain. in a case of mortification of the foot which came on with a very offensive smell, I was induced to amputate as the request of the patient it was performed a little above the ankles, the arteries were completely ossified so much so that I was obliged upon tying them up to mash their surface together with my finger and thumb with a vice to prevent hemorrhagic a circumstance which often occurs in such cases.

Pressures often produces Mortification in parts contiguous to the os sacrum in person who are long confined on their backs from broken bones, and other causes and it most commonly preceded by inflamation I have seen mortification in the arms by pressure of the bed clothes.

The symptomes of Mortification are a burning sensation, a dark red colour disappearing on pressure and returning slowly. a tumefaction take place which readily receives the impression of the finger. Small blisters containing

a thin acrid Serum, arises around the edges. as the disease advance Globules are thrown out.

The remedies for Mortification are general and local. the general remedies bloodletting if inflamation be present but if it proceed from languor or debility of the parts (if the theory which I have advised than the disease depend upon too much action be just) then all stimulating applica=tions as cerat. ort, balsam, cordials and scarifications together with opium, nourishing diet barks &c should not be made use off; but if the patient be accustomed to the use of wine it may be continued to a certain degree in almost every instance the local remedies are blisters to the part affected, the charcoal poultice is highly serviceable to prevent the smell of the dead parts. When Mortification ensues from every=pelas in the cutis vera and pus has made its way into the cellular membrane it should of be laid open freely and treated with bread and milk poultice.

in Mortification of the legs pressure should be avoided, for this purpose the leg may be supported by pillows placed under the thigh. I have been in the habit of using acid Nitric diluted with an equal quan=tity of water, it correct the fetor by stopping the putrefactive process. it may also stimulate the absorbent to a quicker action and cause separate the dead parts

more rapidly, it should not. However be applied too near the living parts or it will cauterize them. if the weather be very warm magots are apt to form in the dead part wash them with this diluted acid and it will remove them.

The Second Species of Inflammation is their peculiar kind which produces Carbuncles. they are circumscribed hard tumours. they begin in the Skin like pimples are of a dusky red colour with pale edges attended with burning pain. a kind of suppuration takes place in the cellular membrane: but good healthy pus is never formed. they occur on the back and sides and most frequently in people who have lived well. they are dangerous and numerous they sometimes though very rarely occur on the head. much however depends upon the strength of the constitution

A case of Dr Wistar's will serve to shew the peculiarity of this kind of inflammation he was called to a man between fifty and sixty years of age, in consequence of one of the carbuncle upon his leg, a circle of inflammation surrounded the tumour. the Doctor was called about three day, after the commencement of the disease; after trying a number of remedies. Dr Hunges was consulted who said he was well acquainted with them in France and had cured several of them by scarifications, accordingly he was scarified transversally about a quarter of an inch all over the surface and then circular incisions was made all round it. this cured it.

it operates by changing the mode of action to the adhesive inflam=mation. Some years ago I was led by the uncertainty of the remedies employed in gangrene, to seek for remedies more certain and effectual in its operations. From the good effect of blisters in many cases I was induced to bring them in mortification and they succeeded by my most sanguine expectation. The good effects of blisters may be seen in the case of M. C. related in a volume of Dr Lo's museum. who under mistake has used Polygonum Persicaria or common arsmart in a common infer occurrence of life. in conse=quence of which a violent inflammation ensued in the regio ani. and on the Scrotum. the antiphlogistic regimen was tried but without any benefit and after (in the most dangerous state) resisting bark and other antiseptic remedies it was cured by the appli=cation of a blister to the part affected.

The pain in mortification is caused by inflammation and spasms of the vessels. a Patient of mine was affected by a violent pain in the foot. a small reddish spot was seen at the top of it appearing at first like Erisipelas which after wards disappeared and then came again a little above the ankle, the patient now complained of great pains when the foot was raised up, but which somewhat abated, upon setting it down owing to the diseased action of the vessels, because the blood filling the vessels are over come the spasms. then was the cause of the pains for when the foot was raised the vessels was emptied of their distending

blood and the convulsive action of the vessels took place. Charcoal poultice was applied on his foot. his bowels were much ~~intended~~ disordered owing to his having taken so much Laudanum which was obviated by his taken a purgative. the bark was given largely ~~to the extent to~~ half a pound in 24 hours but without any good effect, application of bark and brandy was made over the stomach and 5 grains of volatil alkali given every two hours. the Bark was now omitted as it was found to be of no benefit, some Senna & Manna were give to obviate costiveness. but notwithstanding these application the mortification still increased. a blister plaster was applied to which stopped the mortification. and changed the liver color which passed to a pale red under the blister; the fermenting Charcoal poultice was omitted and another blister applied just below the first on the limb which was of a dark colour and cold. the dead part was washed with a mixture of Nitric acid and equal part of water. the mortified part after this gradually sloughed off and the patient is now recovered.

When Mortification is caused by inflammation a blister should be applied. Blisters have been lately found as effectual in Carbuncle as any other kind of inflamation especially in relieving immediately than distressing by burning sensations. I lately cured one in the back of a lady as large a a common plate which she compared to a warming pan of hot coals. the sensation was distressing

as soon as the blister was applied the mortification ceased the dead part sloughed in a few days and the sore healed kindly Mr Hunter's theory I believe is now pretty generally received that is an increase of action beyond what the powers of the part can bear. but I am rather inclined to think than in every species of mortification there is something peculiar leading to the death of the part, something more than the violence of inflammatory action for if it depend upon the violence of the action alone, the application of a blister which is highly stimulating ought to produce the death of the part more quickly by producing a still greater increase of action. but on the contrary, the effect a cure. I believe by altering the disposition, by changing the mode of action from the disease to the healthy kind.

Of Wounds

A wound may be defined a separation of external part, by mechanical action, they differ according to the situation of the part injured and the manner by which the injury is sustained.

There are two kinds of wounds incised and contused.

an incised wound is made by a clean sharp cutting instrument

a Contused wound is allways accompanied by bruising of the soft part and is divided into these kinds viz, lacerated punctured and gun shot or penetrating wounds. they are always attended with a greater or better effusion of blood; but in lacerated large vessels are often divided without any considerable Hemorrhage. Incised wounds bleed much more than contused one. because in the first case there is nothing to prevent a flow of blood, but in the latter the dead matter at the end of the arteries caused by the contusion act as a stimulant to coagulate the blood

the Doctor relates a case from Cheselden) I once saw a case where a boy has his arm ground off in a mill between the Elbow and shoulder; in this case scarcely any hemorrhagy occured owing to the contused end of the

arteries causing the blood to coagulate in their extremities and formed plugs than stopped the hemorrhagie. an incision with a knife would have caused a much greater flow of blood there are three ways in which Hemorrhagy may terminate in contused wounds.

1st by a diminished power of Circulation

2 by a coagulation of blood forming plug.

3 by pressure caused by an infusion of blood in the cellular membrane which pressing on the side of the vessels lessen their Diameter.

bruised parts cannot bleed much, the Hemorrhagy is stopped, by the bruise causing the coagulation of the blood, the coagulation take place first round the vessels contused wounds by the violence of the pressure occasion the death of the ends of the vessels. in incised wounds the first thing necessary to be attended to, is the flow of blood; this is sometimes in great quantities but not unfrequently. a short time after the injury it spontaneously cease a coagulation is formed and as it were plugged up the ends of the vessels. if this be not the case it may sometimes be stopped by pressure made by the fingers: but should this fail a tourniquet must be applied above the elbow if the wound be on the arm, and above the knee if the wound be on the leg. because there being one

Patients carrying the blood to coagulate in their extremities and forming false aneurisms. On incision [illegible] a fluid would have issued a mass of coagulated blood or else one large one in which there would have been several =ated or contracted vessels.

1st by a diminished power of contraction

2 by a coagulation of blood forming false

3 by pressure caused by an increase of blood in the collateral vessels which pressing on the side of the vessel form the contracted.

Ligatured vessels cannot other wise, the aneurism is stopped, by the tissues causing the coagulation of the blood, the coagulation takes place first around the vessel contracted wounds by the motions of the aneurism occasion the death of the cut of the vessel. In incised wounds the lips being necessary to be attended to in the flow of blood, the aneurism is great quantities but not unfrequently. a short time after the injury it diminishes by cease a coagulation in pressure and is more obliged up the cut of the vessel, if that be not the case it may eliminated be obliged by pressure made on the tissues; but should this fail a tourniquet must be applied above the elbow if the wound be on the arm and above the knee if the wound be on the leg. Aneurisms there being one

one bone in these places the pressure will be more effectual than if the tourniquet was applied on the fore arm. or below the knee. if it be applied above the knee a compress or pad must first be applied on the artery. the hemorrhagy being stopped the part must be washed clean with warm water and search made for the bleeding vessels which being found they must be drawn out with a tenaculum and secured by ligature, it is necessary to tie both end of the bleeding vessels if they be large otherwise the hemorrhagy will carried on by anastomosing branches. When an artery is divided in the body so that it cannot by got as easily it is necessary to pass the tenaculum along with the finger (after being previously tied a single knot over it and the tenaculum) till you come to the arteries as soon as you can got hold of the bleeding vessel slipt the noose over it, and secure it. in cases where the tenaculum cannot be used where the vessels have so much contracted than we cannot see the orifices resources must be had to the needle passing it round a portion of the flesh tying it all up together. if the orifice of the wound be too small enlarge it with a scapel this however seldom happens. if an injury be received on the upper part of the arm the tourniquet cannot be applied here compression with the finger may be made on the sub-clavian artery just where it pass over the first rib, or if the injury be done to the upper part of the femoral artery

pressure may be made on the groin just where the artery pass out of the abdomen.. Sometimes pressure may be made above the wound to form a plug or coagulum in the extremities of the divided vessels and so put a stop to the bleeding. it sometimes happens than vessels are divided in such a situation as not to admit of this kind of treatment., as the extraction of tumors from the mouth & nose which are supplied with arteries. if only one vessel be divided the hemorrhagy may sometimes be stopped by holding a compress of lint for a few minutes on the orifice if the effusion take place from a number of small vessels it may be restrained by a compress of lint, coal pulverised, the application of dry sponge vegetables, astringents &c &c but if this is insufficient resource must be had to the ax but severe method of hot Iron. we sometimes find than when the vessels are injured if the external communication be small than the coagulation of the blood will stop the hemorrhagy. I saw an instance of this kind where a boy in querelling with his school fellow received a wound in the ham with a pen knife. the immediate consequence of which was an effusion of blood into the cellular membrane of the muscles causing great pain the whole calf of the leg was very much distended in this situation he walked home increasing the pain an tumors he went to bed and next morning both pain & tumor

was gone; supposing himself well he got up dressed him-self and went down stairs when the tumor immediately returned, he went to bed again and the tumor subsided. this alteration was experienced two or three times; at this time I was called and immediately pronounced a wound of the popliteal artery. advised the boy to be put to bed and raised the limb to take off the pressure of the blood by gravity the volume of blood was lessen by two or three bleedings in a ~~boat~~ fortnight or three weeks he was quite well. in such cases no probe should be used to ascertain the depth or situation of the wound, least you destroy the plug in the orifice of the artery and bring on hemor-hagy: the practice of some surgeons stuffing the pars full of lint is very injurious and ought to be avoided least you tear open the coagulum which nature has kindly formed

after stopping the hemorrhagy bandage, adhe-sive plasters or sutures must be had recourse to, for approximating the edges of the wound, and if the injury be done to the extensor of the limb in ~~an extended position~~ it may be necessary to apply a long splint to secure the limb in an extended position. in most cases the adhesive plasters will be found sufficient but in wounds of the abdomen sutures must be used

or else the patient will be liable to hernia in this place the coagula should be washed away and then the adhesive plaster spread on leather or linen should be applied transversally across the incision drawing the edges together, they should be applied in such a manner as to favour the escape of bloody matter and pus for if it be confined it may collect in the cellular membrane forming an abscess. this separation of the shaps is more especially requisite when an artery or vein has been taken up so that the pus that is necessarily formed may have passage to escape, after the sides of the wound are drawn together and secured by adhesive plasters a portion of lint suited to the size of the wound and spread with any kind of cerate may be applied to it, on the top of which a compress of linen is to be applied and the whole to be secured by a bandage. then dressing should not be removed under 48 hours in which time I have seen an union of the divided parts. Inflammation only now is to be feared, and if it should run high blood letting must be used accordingly to the symptoms, low diet rest &c. purges may be employed occasionally to prevent costiveness. if no inflamation be present and the patient be weakened, he may take some animal food, as some inflammation is necessary to cause an union this practice is recommendable except in wounds caused

by flaps. which should be left to suppurate as part of the flap may be left in the wound. even transverse incisions may be remedied by adhesive plaster, they will be generally found sufficient when the limb is placed so as to cause no restraint in bringing the edges of the wound together. this should always be preferred to sticking it up with a needle and thread for two reasons.

1st avoiding pains

2 every stitch of the needle add a new punctured wound ~~to the~~ injury also thread mostly occasion suppuration by the irritation it produces.

but there are some parts where suture must be used as in the Eye lids, nose ears scrotum, abdomen and particular ~~affections~~ of the scalp. In where the parts are so flexible as not to admit of any other treatment. we should be carefull in injuring the scalp, not to draw the divided edges too much for the purposes of bring-ing them together, least by over straining the flap we produce mortification in the part by stopping the circulation

Punctured Wounds

A Punctured wound is the separation of the soft solids communicating externally by a small opening, the irritation is greater here than in incised wounds.. in case of punctured wounds we should be very cautious in using a probe for the purpose of investigating the extent of the wound since by that means we irritate the wound and destroy any adhesion which may have taken place and thereby prevent or retard the cure. it is better to make an incision to examine for any extremous substances near the surface than to use the probe or the forceps for that purpose. this should be done soon after the accident happened or else it should not be opened until suppuration takes place. when matter shall col=lect in a punctured wound and the extrenious body by which the injury was produced be not discharged it then becomes very necessary to dilate it and also when large vessels are wounded and cannot be taken up without. again it becomes necessary to dilate them when the constitution suffer from them.

In July 1805 a lad in getting over a fence fell upon a nail which run into the flesh below the knee about an inch upward towards the joints, febrile symptoms came on and he complained of sickness in the Epigastric region and pain in his neck and head, his pulse was frequent and quick, the wound was opened and the pain

was translated to the wounded part immediatly and excepting here he felt no pain in any part of his body. the wound was dressed with a common poultice and healed kindly..

I know a lady who was thrown into convulsions by puncturing her finger with a needle these convulsions continued for the space of an hour and a half. the puncture was then dilated and the spasm went off without returning.

When punctures or contusions happen during worms they should not be healed up too speedily but suppuration of the part should be promoted, cordial diet and wine should be given, by which means we frequently prevent tetanus

Lacerated Wounds.

these are made with blunt instruments which kill the flesh which is separated. anodynes combined with small portions of Emetics, so as to act as sudorifics for the purpose of composing the patient and bread and milk poultice applied till the dead part come away. if inflammation accompanies with fever supervene it must be remedied. if symptomes of Mortifications come on case the patient with opiates and prescribe port wine barks &c

her translated to the wounded part immediately and operation have to left no pain in any part of his body. The wound was cleaned with a common feather and treated kindly.

I know a lady who her throat into convulsions by overthrowing her pinny with a needle three centuries contained for the absence of her head and a leg. The symptoms has filled and the pain recall all violence relaxing

When persons are convulsion to place during fainting they should not be treated up too speedily and application of the feet should be promoted, rubbed. Not and warm and opinion, by which means are frequently prevent fatness

Lacerated Wounds

Have are made with blunt instrument which tell the flesh which is lacerated. Surgeon considered both about position of cuticle, so as to act as authorities for the purpose of conserving the patient and bones and with healthy application. If the blood flow from some vessel, if inflammation accompanies with fever, depressing it must be treated. If deformities of limbs, cases are case the patient with opinion and particular, hard bones, teeth &c

Penetrating Wounds

are such as ~~cutting~~ enter into the abdomen & thorax & when wounds happen in the Thorax they are attended with danger by causing inflammation of the cavity, the lungs contract the patient preform respiration with great difficulty if the lungs be wounded the patient cough up blood and there is likewise an effusion into the cavity causing great depression. Sometimes the vessels are injured so than we have to take them up if one of the intercostals arteries be divided so than the tenaculum cannot take it up pass a ligature round the rib and secure it in than manner. it has been recommended to put lint between the ligature and the rib to prevent it cutting, but it would be better to pass the ligature through a compress made for the purpose which would prevent the danger of the compress from slipping from under the ligature and getting into the cavity of the thorax where it will cause inflammation of the pleura, which would be very liable to take place when lint is applied This I never have performed Balls & shot occasion the worst of wound because they tear the soft part and occasion a loss of substances.

Wounds of the Thorax occasioned by balls are very distressing they generally inflame the parts where they enter making suppuration and sloughing off necessary before the

orifice can heal, the patient is affected with anxiety and difficulty of breathing. blood letting, rest, low diet &c are necessary. the dressing are apt to be drawn in the Thorax in breathing this indeed happened in a case under my care, and care therefore should be taken to dress such wounds with adhesive plaster or bread and milk poultice confined in a gaze bag. the sides of the wound when not killed should be kept together for the purpose of uniting them if possible by the first intention. when the sides of the wounds are approximated and united the cavity is rendered complete and the cure thus effected. no bad effect are to be dreaded from the air that is left within the cavity. this never causes inflamation as is seen in Emphysema. the inflammation when it does supervene arises Mr Hunter says from the stimulus of imperfection.

Two Officers playing at cards together a quarrel arose between them, whereupon one was stabed, the other with a dirk just above the right papilla in the Thorax, the air had admission into the cavity when I saw him when I saw him his extremities were cold, his pulse small and irregular, his countenance pale, no symptoms of inflammation of the pleura appeared. I applied adhesive plasters on the wound and the third day it united. on the 6th day he could walk, go out into the street &c having spoken of wounds in general I shall now proceed to particular ones. —

Wounds of the Face

as there are many cases in the treatement of wounds in this part in which sutures is always necessary, so there likewise cases in which it should never be used, the ancient surgeons used sutures in almost all cases of wounds, but in wound of the face the always occasionned deformity by the marks of the stiches remaining after the wounds are healed

I have seen a lady one side of whose face was very handsome and the other side very much deformed in consequence of this mode of treatment. in wounds of the Eyes lids unless the torn be divided adhesive plaster will answer the purpose. we should be extremely carefull to avoid puncturing lunica adnata the stitch should only go through the skin of the Eye lids because if the thread were to come in contact with the globe of the Eye it would continually irritate it and bring on inflammation of the whole Eye. I have seen a case where shot have entered the sclerotica and punctured the christalline lens. I have seen another case where they Eye of a young lady was punctured by a piece of Glass. from what ever cause the Eye may be wounded we should endeavour to remove all irritating substance and by well timed bleeding purging low diet, blisters scarfications &c with the use of collyria we may prevent suppuration. the best collyrium is an infusion of the pith of sassafras, in water or milk & water

the patient should be kept in a dark room. if blindness occurs it is some times in the Surgeon power to remove it by operation. of this however I shall say more hereafter (see Cox's Museum) ger

Generally in wounds of the Lips unattended with a loss of Substance, it will be sufficient to bring the divided Edges of the wound together with adhesive plaster but if a portion of the lips be lost it is necessary to use sutures.

Wounds of the tongue which we sometimes find to occur from people biting or receiving a blow on the Chin when the tongue is protruded. here it is necessary to use the interrupted suture as it is difficult to get at a wound of the tongue the patient shutting his mouth with pain. it is necessary to place a soft stick of wood between the teeth to prevent to getting bit. the tongue if necessary may be drawn out with a hook. wounds of the tongue generally heal in about six days. the patient should be fed with spoon victuals. in wound of the Ears a single suture is sufficient

wounds in the throat mostly occur in people intending to commit suicide. When the skin only is divided there is no difficulty of curing it. but some times the trachea is divided and the large vessels exposed. the first thing to be done is to attend to the Hemorrhagia and secure all the bleeding vessels either arteries or veines. or if the Carotide

be divided they may be secured by ligature as the circulation may go on to the head by the vertebral arteries. Where the Hemorrhagy is stopped the side of the wound may be approximated this can rarely be done if small by adhesive plaster alone. but if there not be sufficient we may use sutures, having caution to include the cellular substance only for if a stitch was taken in the skaring it might create vomiting by its irritation. and if a stitch was taken in the side of the trachea it would cause a continued coughing. when this is done the head should be inclined forward to favour the union of the divided edges and be secured in that position by a bandage. I believe in every case it would be most proper not to draw the edges to close together so that the blood and matter that is collected may be discharged. all the vessels both arteries & veines should be secured although apparently done bleeding for if any blood be left oozing from the office it may escape into the larynx and cause suffocation. In wounds of the throat a great deal of inconvenience arise from swallowing as every such attempt must separate the sides of the wound. to remedy this it has been advised to introduce a pipe through the nostrils into the throat for the purpose of conveying food into the stomach but this cause too much irritation to be practicable as it keeps the patient constantly coughing and sneezing. he should be supported by nourishing injections thrown up the anus

if cough occurs it must be relieved by demulcents

Wounds of the Abdomen

If they are superficial they should not be treated differently from wounds in any other parts of the body. it sometimes happens in punctured wounds of the abdomen which do not penetrate through the parietes in the cavity. than abcess are formed when this is ascertained they should immediately open in order to prevent the matter from getting into the cavity of the abdomen. but if they be through the parietes there will be danger of peritoneal inflammation to prevent it will always be desirable to unite it by the first intention. in the suture of the abdomen two Needles should be used to each ligature and the stitch should be commenced internally at the distance about 3/8 of an Inch from the divided edge, and the stitch should be about half an inch a part. the patient should be kept to a regimen diet and the bowels freely opened by mild purgative. when union shall have taken place bettwen the divided edges, the sutures may be removed and adhesive plaster used. If any of the viscera by wounded they should first be secured before we stitch up the wound in the parietes. the chief danger arising from wounds of any

of the hollow viscera is the escape of their contents into the cavity of the peritoneum. generally in wounds of the abdomen a piece of the omentum protrudes at the orifice, and if the intestines be wounded feces frequently pass out and the patient will have bloody stools.

If the stomach be wounded food will be discharged through the orifice, vomiting of blood will be induced together with cold sweats and a tendency to faint and when it proves fatal, the patient dies about the third day after remaining in a comatose state till death.

When the intestines are wounded they may be stitched four stitches will be found sufficient. they nots may be tied so as to be on the inside of the intestines when this is done cut off the end of the thread and return the intestine. the thread will get into the cavity of the intestine and pass by the stool it was formely the custom to bring the ends of the ligature out of the wound in the cavity of the abdomen in every case where the intestine were stitched. Dr Physick said this practice is much the safest and therefore he would recommend it to be done, untill Dr Cooper proved that the remaining part of the thread if cut close and left in the belly will get into the cavity of the intestines and pass by stool he tried the experiment on a dog and succeeded. we are not absolutely certain he would do it in the human subject

transverse incisions of the intestines are easier healed than longitudinal ones and it causes much more pains and difficulty to close a longitudinal one than a transverse one since the diameter of the intestine is lessened by the former causing a lodgement of the faeces at than place. if the longitudinal wounds be not too extensive than portion of the intestine may be removed and the transverse ends brought together. the practice has been tried and succeeded when three inches of the intestines has been cut off, the patient should be fed sparingly so as not to distend the intestines, his food should be almost altogether spoon victuals. Laudanum should be given to allay the pain and to keep the intestines still so than the peristaltic motion may not prevent an union. Glister should not be administered least probably a part may escape at the wound even the stomach may be stitched when wounded. I have known an instance where it was done and the patient recovered.

When the omentum is wounded generally some haemorrhagy takes place the bleeding vessels should be taken up with the tenaculum. and secure with a ligature and the Omentum stitched but the ends of the thread must be left out of the wound on both case. sometimes the bowels are injured and do not protude. it has been a question in dispute whether the wound in the parietes should be dilated search for the injured part or not. I believe

Instances occasions of the interference are deeper treated than simply
=ding over and it seems much more consonant with difficulty to class
a long instructed one from a transgressing one since the character
of the intention is known only the former concerning a disregard of the
person at their place. If the long instructed person be not in a position
have position of the intention may be discovered and the transgressed
easily through impatience. The penalties have been fixed and discussed
in the three grades of the intention the second ~~of the punishment~~
should be left wholly to a person ~~to be the punishment~~, the
Good Church be absent altogether above mentioned. Punishment
should be given to allay the pain and to keep the intention
still to those the essentially sinning may not prevent an innocent
Christ should not be admission least probably a good many
respects of the transgressed over the Church may be satisfied
when provided. I have known an instance where it was done
since the punishment occurred.

When the question is generally some time
=ness take place the following period should be taken up
with the same column. One person with a figure and the Lower
=ness divided but the end of the person must be left and
of the person of one with care. Some time the person and
punished and do not partake. It has been a question with
=ate whether the person or the parents should be
blotted person for the injured person or not. I believe

it is right to search for it by dilating the wound in a degree if it be not large enough already. but the wound should not be enlarged freely least you induce great inflammation; but there are cases in which the intestines have been wounded where nothing has been done. in such cases where the intestines have been wounded it commonly unite to the peritoneum and the wound of the parietes by the adhesion of the inflammation. it would seem when the intestines are wounded they stop their peristaltic motion so as not to prevent or hinder the adhesion. when the bowels are injured and the wound cannot be discovered. if the orifice be large enough for the intestines to protude it should be stitched up. if inflammation intervene. copious bleeding, purging low diet & are necessary and sometimes through the circulation seems weak yet the inflammation may prevent to a great extent

In wounds in the Liver if the right lobe be injured the pain will be felt in the left shoulder; if the left lobe the pain will be felt in the right shoulder. it is of a dull heavy kind. if the wound be small it will in general heal very soon; but if it be large there is in general a very considerable hemorrhagy and sometimes inflammation is produced in the peritoneum by the accumulation and distention of blood in the abdomen, in those cases little can be done. the patient should use evacuations and live on Barley water.

and the like. if his pulse is full and hard he should be bleed freely. if the gall bladder be wounded its contents empty into the cavity of the abdomen causing by its stimulus violent inflammation. it always proves fatal. I believe the same happens from wounds of the Pancreatic Duct.

When the Kidneys are wounded the patient will pass bloody urine and if it pass into the cavity of the abdomen it produces death though the back part of the Kidney may be wounded and the wound heal up without any inconvenience.

Wounds of the Bladder mostly prove fatal when they communicate with the cavity of the peritoneum. but when wounded below that cavity they are attended with no bad consequence.

In Wounds of the joints we are not carefull to guard against their inflammation and suppuration occur, they should be healed with adhesive plaster Mr Henry said sutures are not necessary if you use them, be carefull they do not get into the joint or else the irritation of the thread will cause inflammation of the whole joint. I saw a case where a turner cut his knee with a chisel, the wound was oblique penetrating through the capsular ligament, it was closed with adhesive plaster a long splint was applied reaching from the ischium to the ankle to keep the leg extended this is always necessary. no unpleasant symptoms

came on, the patient in about a week was well. I have seen wounds of the joint where the bone was injured and yet the wound got well by this kind of treatment. Mr Home says we should always try to effect union by the first intention. wounds of the joint should likewise al=ways be treated with the limb extended. the bad effect of an opposite mode of treatment where the sides are preven=ted from coming together by lint may be seen by the following case. a patient who had received a wound in the knee was treated in this manner. in addition to this by dipping the lint in spirit. perpetual (ridiculous) and in consequence of it, he was afflicted with fever, delirium itch=ing convulsions &c so that he could not sleep unless two persons sat by him and held his leg. abscess formed both above and below the joint. every time the dressing was taken away a considerable quantity of matter together with sinovia of the joint was discharged and great inflamma=tion of the joint had taken place. this at first was a clean incised wound after this an oedema came on but this was cured by mercurial purges. this case got well after four months, besides common dressings in wounds of the joints we use a splint for the purpose of keeping the limb extended, this prevents the usual symptoms than occur. without this precaution such as delirium, twitchings

be together with inflammation of the divided surface rubing against each other. it should be applied so as to prevent all motion of the joint as a very slight motion of it does much injury the situation of a limb where we expect anchylosis or where we wish it to take place will vary according to the limb affected. if it be the Elbow the arm should be kept moderately bent, for if the union of the bone take place when it is straight the patient will have no use of the limb so than it will be very inconvenient. but if the elbow be some whats bent the patient can perform many very usefull motions. but where the knee joint be affected and the limb fixed the patient will not be able to walk. so than the leg in affections of the knee joint should always be kept extended as it will be most usefull in than posture. the limb being brought into than position. the wound should be dressed with adherise plaster and secured by a splint and roller. the patient should be bled and put on an antiphlogistic regimen, purge and if necessary a blister may be applied wounds often heal easily under this treatment though their first appearance is very unfavourable. the cartilages on the ends of the bones forming joints, are sometimes cut through and yet unite by the first intention. from observations I have been led to conclude than inflammation of Joints does not soon take place as inflamation

It together with information of the observed use does seeking against such other. It should be applied so as to prevent all question of the point or a very slight portion of it does invade upon the tenures of land where are applied ploughing or reaping. For will it to take place will vary according to the land applied. It is the Elbow the same should be kept unchanged but, as of the manner of the same take place when it is through the pastural will have no use of the land so there it will be very unnecessary. but if the elbow be some other than the position our perform many very useful purposes. but where the same point be applied and the land upon the plough will and be able to work. so then the leg in application of the same point should always be kept equally or it will be most useful in these positions. The land being brought into these positions the mould should be placed with otherwise furrows and drawn by a plough and other the pastural should be added and put on an antipathy. Perhaps and if necessary a plate may be applied however after that simply under the transmit through these point a place more is very unnecessary. The contiguous the rails of the lower opening point are alternations and keeping and made by the point instruction. Perhaps observations I have been led to conclude that from nature of which does not have take place in my plan also

from the same cause would in any other part of the body the irritation causing only an increase of former action and a much greater secretion of Sinovia in large lacerated wounds of the joints such as Surgeons call compound luxations, when they must suppurate, it has been disputed whether the limb should be amputated or not. if it be not done there is sometimes danger of mortification from the violence of the inflammation and if the Patient escape this by being much reduced he is danger of Tetanus, especially in warm weather. in such cases it is best to state the danger of the case, if an attempt is made to preserve the limb and then the advantage of amputation and if he escape suppuration hectic fever and consequently amputation. at best the limb must anchylose and be rendered stiff ever after or if anchilosis be prevented the cartilages will be removed and nothing but a ligature will connect the bones together rendering it perfectly useless.
if attempt are to be made to save it, the best application is bread and milk poultice. there are more danger of these symptoms occuring in warm weather and in persons accustomed to drinking spirituous liquor; there is more danger also if the patient be old than if he be young. partial stiffness of a joint is owing to adhesion forming between the capsular ligament and the joint or ends of the bone, but there are cases where the joint cannot return to its natural state

from the above cause would in any other kind of the body the initiative causing only an increase of pleasure action and a muscle, causes lessening of sensation in the body, increased moved of the parts such as a tongue, all complicated operations, which they could distinguish, if has been disputed whether the kind should be complicated or not. If it is said there is a connection of nerve of nerve, taken from the cerebrum of the parts, and consequently the rational creature has by doing much desired he is deserve of pleasure, especially in habits. In such case it is hard to state the degree of the case, if an attempt is made to preserve the kind and then the consequence of complicated or not if be a single distinction which from such consequently complicated, or but the kind must complicate and be caused still over effect or of conclusion be prevented the particular will be converted and nothing that is important will convert the brain logical concerning of perfectly habits.

It although one to be made to have of the kind explication is based and with possible. There are three degree of these symptoms according as lower intellect and in lesions occur to need to combining distinction figure; there is more degree also if the patient be old than if he be young. Practical difficulties of a point is arising to difference connecting between the explicator his counsel and the point or cause of the case, but there are cases where the point counsel relative to its natural state

and must anchylose. before a joint can become anchilose the cartilage must be removed as they never unite together. I will shew you in what manner this take place, it never inflamme suparate become carious or slough off, but is removed by absorption. the absorbtion granulations are then thrown out from each end of the bone and uniting together render the joint anchylose forming but one bone. to favour the process we should keep the joint stiff, for if the uniting parts be torn they will not readily reunite, Authors (though without being able to assign any reason for it) Mr Gouch and Mr Pack have advi=sed to saw of the ends of the bones, this remove the cartilage out of the way without giving time for them to remove by absorption, but this is a bad practice because it occasion pain and is done with difficulty and danger of wounding the soft parts. I believe scraping off the cartilages from the ends of the bones with a knife. when the constitution cannot bear the irritation long enough for the absorbtion to remove it will answer very well. and often better than if the operation was left to nature. a splint should always be used to keep the limb at rest.

and must therefore before a point can become conducive the
conditions must be secured or they never unite together. Will
there ever in Ireland become this table place, it never in Germany
dependents citizens contain or through off, but is secured by
other ties. The other ties of consideration are those therein and
from each end of the bone and uniting together under the point
on the face forming not one bone. In proportion the head
keeps the point off, for if the uniting point be bone they will not
easily separate. Cutting through inflexed being able to unique
any section for it JOH & Smith and OLY & Smith have adm-
-ted to law of the end of the bone, the manner the reliefs
and of the long inflexed giving time for them to connect by
adhesion, but this is a bad practice because it occasions
pain and is done with difficulty and danger of removing the
deep point. I believe after removing off the reliefs from the
end of the bone with a knife, when the constitution
normal, then the irritation long enough for the adhesion
to secure it will answer very well. and often bolter than
if the operation was left to nature. a difficult choice
always be used to keep the limb at rest

Wounds of the Nerves & tendons

When a nerve is partially divided it is said to produce great pains and twitching, convulsions numbenes and paralise and this is said to be the case where these symptomes follow. —— Phlebotomy but it cannot be depended upon. for no surgical operation can be performed in any part of the body without wit-hout wounding a number of the small branches of the nerves and yet these symptoms never occur. the inflammation & swelling sometimes occuring after phlebotomy. I shall account for it in a different manner I mention this to guard you against a very terrible operation propo-sed by Mr Bell, which is to make a complete division of the soft parts down to the bone. When weakness is felt in the arm immediately after blood letting and the operation attended with pain and if it increases and it becomes worse for two or three days instead of better, then we may suppose than a nerve or tendon is woun-ded and an incision may be carried a little deeper than the original wound and the nerve completely divided but I am happy to say that such cases seldom occurs. than in this city where so much venesection is done I have seen but a few cases. perhaps the best symptoms of a wounded nerve, are numbness and a partial paralisis of the arm below to which the nerve goes.

Wounds of the tendons are no worse

Wounds of the Nerves & tendons

than wounds of other parts unless punctures of the fascia. These are sometimes attended with inflammation of the parts beneath them which are bound down and compressed and suppuration take place. When inflammation is an attendant upon wounds of the fascia of the thigh, head &c a blister should be applied over the wounded parts, if this be not sufficient to relieve the inflammation and matter be collected underneath a full incision should be made to give vent to the matter. Sometimes the tendons are cut quite through, they require no different mode of treatment from other wound, the limb should be secured in the best position and the edges of the wound brought together with adhesive plaster

When the tendo achilles is wounded which often happens, the toes and foot should be extended this may be done in two ways

1st by fastening a roller to the foot and carrying it over the heel, over the back part of the leg and securing it on the thigh

2d by a piece of pasteboard placed on the fore part of the leg and secured by a roller, care should be taken however, in all cases of wound of the joints above the heel not to make too much extension, but just sufficient to bring the divided edges in contact for by extending the toes too much we throw the skin into wrinkles and bring them

Men invented of other tools with which instruments of the same. They are alternatives offered merely as illustrations of the great variety that may be found there and the powered and supplementary tools which are used in medicine in an attempt and upon behalf of the patient. Taking medicine in an attempt and upon behalf of the patient of the Bright, head to a bright should be applied as the operated light, if that be not sufficient to relieve the patient medicine could another be collected instrument or full measure could be made to pass over to the medical. Instruments that are not quite through, they require an different models of head mirror other instrument the limit should be lessened in the best practitioner and the edge of the round instrument tapering with a lessening pitch.

When the tonsils are inserted instrument offers the tongue the nose and foot should be explained then must be here an have range

Put by fastening a collar to the foot and carrying it over the head over the back part of the leg and crossing it on the thigh

Put by a piece of pasteboard placed on the front of the leg and covered by a collar. The should be taken towards in all cases of wound of the parts where the head not to make too much or lesions, and from affected to bring the divided edges on contact for by approximating the lips the more the blood flow into vessels and bring them

in contact with the divided edges, and prevent their union, this sometimes will happen from contraction of a part even with a moderate extension of the foot., turning in, the edges of the wound so than it cannot heal, this we sometimes find after dressing it for two or three weeks without any symptoms of healing, the skin in such cases should be turned and should be kept so by the interrupted suture. When the tendo achillis is divided the foot should not be used for six weeks.

Wounds of the Veins, the inflammation and swelling which sometimes is the consequence of phlebotomy is best treated of by Mr Hunter in a paper upon inflamation of the veins published in the 1st volume of medical transactions which I shall read to you (vide Medical & Phylosophical transactions volum. 1st) when symptoms before mentioned occurred it was supposed than a nerve or tendon was wounded and than the person was a bad operator, it has been proposed by Mr Bell under such circumstances to divide the soft parts just above the wound by a transverse incision to a considerable depth so than the nerve might be divided, but this should never be done though it alleviate the pains, and patients have got well after such treatment. it should not be done because it subject the patients to much greater danger and the alleviating of pain is owing only to the taking of the inflamatory tension of the part by dividing it

in contact with the divided edges, and prevent their unions. This formation with the proper construction of a dressed wound with a single ligature of the foot, turning on the edges of the wound as the natural hinge. After the operation, and after the dressing is fixed on, the patient should be placed on a proper frame, the thighs so that the knees should be bended and should be kept in by the interposed cushions. When the knee joints are divided the foot should not be used for six weeks.

Wounds of the Penis.

The inflammatory swelling which sometimes is the consequence of phlebotomy is best treated by Mr Hunter in a paper upon inflammation of the penis published in the 7th volume of medical transactions which I shall read to you. Mr Hunter observed that when a person died of a violent inflammation of the penis, it was found that a quantity of lymph was formed out from the glandular part of the penis. It was confined by Mr Hunter to a good quantity. It was found by a transverse incision to be considerable depth so that the penis might be divided, but the blood vessels be closed through it without the penis, and patients have got well after such treatment. It should not be done because it indicated the patient to much pain. Dangerous and the operation of cutting is giving only to the taking of the inflammatory tumour of the penis by cupping

Sutures I promised in my last lecture to give you a descrip=tion of sutures in our next I shall therefore proceed with that subject

The kinds of sutures which I prefer are the interrupted and twisted. and first of the interrupted

they are nothing more than a simple stitch made by means of a needle passed from one of the mouth to the other through the edges of the wound, this done draw the edges in contact and tye a knot. this however should not be direc=tly over the wound but a little to one side and the suture is complete

twisted sutures are effected by means of a silver wire incased in a steel point which can be taken of at plea=sure, this is to be passed through the edges of the wound from one side to the other which being done draw of the steel case than it may not hurt the patient, by its sharp point and the wire remains behind in the edges of the wound then take a ligature and wind it around the wire in the shape of the figure 8, always decussitating in the centre and drawing the edges of the wound in close contact. when the wounds has united sufficently to take off the threads and draw the wire out gently and the thread will come away.

Illustrated & Annotated in my last lecture to prove a chemical
theory of pictures in our royal & school Museums proceed with the study
the study of pictures which ought to be as the interesting first
and twelfth. and first of the uninstructed

Now one nothing more than a simple diffold work of
means of a needle passed from one of the measures to the other
through the edges of the pressed, this draws down the edges on
contract and form a fold. this measures should be done
fully over the pressed sheets folded to one side and the sections
is complete

Illustrated pictures are effected by means of a deliver
wire or cord in a fold form which can be taken off at pleas
sure, that is to be pressed through the edges of the pressed
from one side to the other which being done draw of the
fold can then be sewed and the pictures, by the sewing
thread and the wire connection fixed on the edges of the
pressed then folds a impressed and bound to connect the wire
in the shape of the figure 8 always then relating in
the centre and covering the edges of the pressed in order
contract. when the pressed has resisted sufficiently to hold
off the thread and draw the wire and sewing and the
thread will come away.

Gun Shot Wounds.

They were considered in the early periods as being a distinct species of wounds, the livid colour which entered accompanied with a black vesication and gangren caused them to suppose the effect must either resulted from poison or from the part being burned (because perhaps from fire and poison being so little known) and the acrid substances which the applied to them frequently caused gangrene, and large sloughs; but these wounds are now considered as so many varieties of contused wounds if the body occasioned the wound be of a roundish figure the wound is undoubtedly a contused one. when the ball goes with great velocity it occasion the death of the divided parts. The greater velocity of the projected body, the greater is the injury of the divided parts, and than surface through which it passes out always heal first. and with less slough. Sometimes uniting by the first intention without the formation of any slough. the parts formed into a crust or slough should be extracted with great care to prevent hemorrhagy. we should therefore watch when it is about to slough off which is generally about the 14th days some persons might think it necessary to extract the slough when it becomes somewhat loose, but all violence should however be avoided. if the vessels divided be large for fear of hemorrhagy which often occurs.. when the part slough in cases of Gun shot wounds, even when no hemorrhagy had occurred at the

Gun Shot Wound.

They were considered in the early Journal as being a distinct Species of Wound; the Ball tolerably entwined accompanied with a black excoriation and, perhaps contused Bruise surrounding the effect must either totally have prevent or from the heat being removed distance sufficient from the end Powder being small Grained) and the Ball additional which the effected to these frequently Fractured Cartilages and large Muscles; but these Wounds are more considered as a mere Possession of contained Wound of the body occasioned the Wound be of a remarkable Species the Wounded in mechanically a contused one. When the Ball is with equal violently at occasions the death of the diminished Pain; the greater rectility of the Propelled body. The operator in the recovery of the diminished Pain, see Effects observe the Wound Infinite of Bones and always Heal Pain. and with ten Days, Mortifications Suppuration of the Pain Infection without the Permission of any Therefore the Pain joined with a Gun Shot Wounds ought be extracted with great care to prevent Inflammation. We should Dressing with Pain it is adviseable to Dressing. which is generally effect the Inflammation Inflammation must Limit it necessary to extract the Bullet without it becomes Bone without loss, but all Injuries should have been considered of the Wound Divided or Injury for Loss of Bones by which often occurs. When the Wound through in Bone of Gun Shot Wounds, were when no Hemorrhage had occurred of the

time of the accident owing to the vessels being killed by the violence of the contusion which portion of them come away when the part slough with other dead matter. it has been advised to bleed freely in all cases of Gun shot wound. but I could not in all cases recommend bleeding at first. if the ball wore with a small degree of velocity it does not destroy the divided parts and these cases heal sooner where the force of the ball is weak than these where the force of ball partake of great velocity, because the parts are only torn.

Gun shot wounds requires the same method of treatment as other lacerated wounds. when the ball is lodged in the trachea the patient performs respiration with difficulty. in such cases the ball should be immediately extracted to preserve the life of the Patient. Gun shot wounds of the Scalp are treated in the same manner generally as other wounds of that part. it is necessary in some affections of the Scalp to lay it open by incisions for the purpose of examining the State of the Cranium when the Cranium is laid bare with a ball the exposed part is violently contused should be removed, as the contusion might occasion an abcess in the Cranium. these occurrances do not differ from other wounds I believe, they have nothing particular to themselves. a gun smith became weary of life, determined to put an end to his Existence when his fellow workmen had gone to dinner. in order to accomplish his design. he loaded a pistol and applied it to the back of his Ear

time of the assembling of the synod being settled by the conference of the contending parties of them came among them the Jesuit Father with other, two monks. It has been observed to hold firmly in all cases of form that formerly. but should not in all cases determine the point. if the bell were with a small degree of certainty it does not that we the christian both and there can find serious when the force the bell is weak then there takes the place of bell probably equal certainty. In some the point can only there.

Our ritual provides requires the firmness weakness of instrument or other to consider rounds. When the bell is judged in the tracks the Jesuit Fathers conformers with difficulty in. first case the bell should be immediately replaced to preserve the life of the Christ. Your that rounds of the truth are treated in the some manner generally or other rounds of their part. it is necessary in some affection of the church to say it open in occasion for the purpose of consuming the Holy of the Communion when the Communion is kept days with a bell the original and is virtually contained should be lessened, or the sentence would occasions an error in the Communion. These consumers of the must suffer from other rounds of religion, they have nothing particular to themselves. a year truth reasons treasury of life determined to find or and to his religious when the other mysteries had power to shines. in order to accomplish his design the treated spirits and applied and to the work of his life.

supposing the contents would have gone through his head. in this however he was disapointed for the load did not enter the scull but take off the whole of the Ears and the surrounding parts so as to expo=se the bone. he was however able to walk to the hospital and relate the whole circumstance. he complained of a great pain in the head. trepaning was delayed he was seized with a delirium inflammation of the dura mater come on and he died. some persons recommended the trepaine, in all cases of gun shot wounds effecting the Cranium. but I would recommend it only in those cases where symptoms of inflamation of the Dura mater supervene. the patient feels most easy when the ball is extracted. when the more fleshy parts are wounded if the ball be deep seated and the orifice sufficiently large for the introduction of a finger it is preferable to a probe to discover the situation of the ball. first because a probe would not convey that accurate sensation which we derive from the finger as to the situation of the ball and state of the parts 2dly the probe would be much more likely to irritate and injure the part than the finger. if the ball be superficial the wound may be dilated and it taken out but if it be deep seated we should not dilate the wound, nor use the probe. indeed the oblique course which the ball frequently take renders it impracticable to dilate the wound. long probes are impro=per for reasons just mentioned. I knew a case of a ball in the ankle where the ball had just made its escape up the leg and

found lodged above the knee. the skin having prevented its escape likewise of a wound in the chest and the ball found half way round the body. the best application on the part is flax seed or bread and milk poultice. all stimulating substances should be carefully avoided, the treatement should vary according to circumstances. sometimes the patient is very much depressed and weak, this should be relieved by anodines if the epiphenomenies are cold bark lime &c may be given. Sinapisms applied to the epiphenomenies are some time of use. we commonly bleed in cases of gun shot wounds but not always as a too speedy removal of inflammation sometimes produces tetanus. I have been recomended by some surgeons; when symptoms of tetanus appear to amputate (from a limb) for the purpose of checking it. but the Doctor says it is of no avail. we should not bleed in all cases indiscriminately but wait till fever or inflamation comes on and if they are proportionably to the wound they are salutary for both the fever and inflammation are necessary to health in gun shot wounds. I have seen a case where inflamation was done away all together by a copious bleeding. the consequence was that tetanus insued & the patient died. when suppuration take place we may use the barks with tonics medicines in neither fever nor inflamation come on we may use them: but if them occur we must have recourse to the antiphlogistic regimen. in gun shot wounds we must treat them according to the nature of the case, if the bone be fractured we must heal them like common fracture or such

found. Indeed, above the throat, the skin having remained entire, the
[illegible] of a wound in the chest and the tail-bone had very round the
body. The best applications on the head is flaxseed or bread and milk
poultice. All stimulating liniments should be carefully avoided. The
treatment should vary according to circumstances determining the total
to every month. If wound and bleed, then should be relieved by cutting
it. The operation can be [illegible] Dr. Gray be given. Giving
a physic to the operation [illegible] time of [illegible]. The commencement
the [illegible] of pain, that wounds but not always or a [illegible] [illegible]
of inflammation produces tetanus. I have been [illegible]
by some surgeons; when symptoms of tetanus appeared to amputate
[illegible] a limb for the purpose of checking it. But the Doctor, [illegible]
of no avail. We should not [illegible] in all cases indiscriminately but
must still have an inflammatory cause or else they are [illegible]
=ately to the wound they are [illegible] but both the [illegible]
inflammation are necessary to result in pain but wounds [illegible]
[illegible] a case where inflammation from [illegible] [illegible] by
a [illegible] bleeding. The [illegible] for that tetanus [illegible]
the [illegible] [illegible]. When [illegible] [illegible] are [illegible] [illegible]
[illegible] with milk [illegible] [illegible] [illegible] [illegible]
or we may use them: but if these [illegible] we must have recourse
to the anti-phlogistic [illegible]. In cases where wounds are [illegible]
[illegible] these according [illegible] the [illegible] of the case of the [illegible]
be practised we must heal them like common [illegible] or [illegible]

fractures occurring from other causes. it is necessary in all cases of wounds of the thorax to bleed as they are always attended with more or less inflamation. I have taken 186 ounces in 14 days and the patient recovered. Blisters applied are sometimes of service if the spine be wounded it occasion a paralisis of all the parts which receives their nerves below the injury. if the cervical marrow be wounded above the phrenetic nerve it occasion Palalysis of the diaphragm and the patient immediately dies if it occurs below than nerve the patient may have life for several days.

Wounds of the abdomen are dangerous according to the viscera wounded. in wounds of the liver I would recommend copious bleeding, if the gall bladder be wounded the patient is affected with great depression and the biles make its escape out of the orifice into the cavity of the abdomen, violent inflamation ensues and the patient dies.

Wounds of the Stomack are mostly fatal the patient is affected with depression a disagreable sensation nausea and a vomiting of blood. a Patient who had been drinking an hearty draught of porter received a wound in the Stomack which was seated equally distant from the Sternum and the ribs. the porter in part came out of the orifice and part was effused in the belly, which was puffed up in the hypogastric region. the patient complained of great pain and finally died. the edges of the wound united by the first

intention and no sign of inflamation of the Stomach appeared I believe he would have recovered the injury done to his Stomach and other part if inflamation of the peritoneum has not taken place in consequence of the contents of the Stomach being effused into it

Wounds of the Bladder prove frequently fatal particularly when it happens in the fundus. I believe not owing to the delicacy of that viscus but to the urine passing into the cavity of the peritoneum and causing inflammation there for we often see the neck of the bladder divided without any bad consequence. in all cases rest is a necessary part of the cure the patient should keep very still. his food should be mild an opening, blisters should be applied to the abdomen; fomenting poultices may be applied with success to the abdomen and the wound should be closed by the interrupted suture, when situated in the abdomen. when a bullet passes through a joint it is apt to injure the ends of the bones composing the joint when this is the case there is great danger. if hectic fever supervene amputation becomes necessary; but frequently the wound partake of the nature of lacerated wounds and sometimes unite by the first intention. when amputation becomes necessary I would recommend it to be done immediately. 1st because by this means you prevent hectic fever from coming on, we avoid inflamation, delirium, frequent pulse cold sweats &c

2d because the patient is more willing to submit to the operation if performed immediately.

Of Ulcers.

I have said sufficient in my formed Lectures to give an idea of the definition of ulcers. they occurs very frequently in the practice of medicine it. those who attend at the hospital to pay the greatest attention to the appearance and methode of cure of Ulcers since a knowledge of their appearance and treatment constitute a considerable part of the practice. there are two Methods of cure

1st by Nature

2d by the assistance of art.

as to the causes of ulcers they are of little or no consequence to the Surgeon. the manner of treatment being the only thing necessary to attend to. to the healing of ulcers there are but three impediments'

1st. whatever injures the constitution and shall confine my observations chiefly to ulcers of the legs. in the healing of an ulcer the first process is detumescence of the edges; next Granulations appear, raising the surface to a level with the contiguous parts, the granulation appear first in small red spots and are covered with coagulable Lymphe. the pus is secreted about the consistence of cream, all healthy pus of a redish colour or of a bluish white. by the subsiding of inflammation the sides of the sore are brought nearer together. Another good effect is the tendency the granulations have to unite with each other. the power of contraction diminish the surface of the sore and consequently lessens the extent

of the disease this power of contraction is very fully exemplified in glandular part as in the extirpation of Schirrous Breast, the skin which is thrown into folds resemble nothing more the consequence of Contraction. I have seen it thrown into folds resembling the mouth of a purse by a drawing string. The next occurrence after the granulated parts, are brought to a level with the old skin, is the production of a new one. The granulation adhere to the edges of the sore from which is commenced the new skin of a whitish colour over which the cuticle is formed at the same time and the new skin is continued over the sore. This new production is large and in old ulcers is not confined to any part alone but is found in many parts constituted small places or spots on the surface of the sore like little Islands.

In the treatement we may apply dry lint to the sore which will absorb the pus and keep it from becoming dry and irritating. Soft dressing which may be spread with little cerat ~~with may be spread~~ or not should be applied over it and secured by a rollet which should be slightly or loosely wrapped, else the lint will be to much pressed in to the granulations. under this treatment they will soon heal up forming a cicatrix. Mr Bayton has advised to the edges with plaster which will very much expedite the cure. If the ulcer happen in any capillary part it is necessary to shave the part before we apply the adhesive plaster.

care should be taken to apply them so as to not force the whole surface of the sore as he should, by that means prevent the evacuation of Pus. the part contiguous should be pressed every day to concentrate the collected matter; if the dressing sticks they may wet with a little cold water previous to the time of dressing: by which the heat and inflammation of the sore are alleviated. the process of granulation is assisted by drawing the old skin over the sore this not only lessen the extent of the sore but supersceed the necessity for the formation of much new substance which is always more tender than that originally formed. it sometimes happens that the sides of ulcers will not unite when approximated, these should be washed with spirits or they may be touched with a little blue vitriol, lunar caustic or any other escharotic. Powdered Rhubarb had been found usefull. if these remedies fail the surface of the sore if small should be exposed to the air to dry and form a crust under which a new skin will often form, and when the crust come away the sore will be healed. it sometimes happens that the flow of pus is so great as to prevent the adhesion of the sides so that they cannot close up; an astringent wash of vitr. alb. and saccher Saturn. in a pint of wine which immediately stopped it. adhesive inflammation came on and the patient got well in a few days. In Healthy constitution

ulcerations seldom demand the aid of Surgeon, the blood vessels are more firm and capable of carrying an healthy action in the cylem vessels, greater action must especially take place in the vessels of the lower parts of the body than those of the upper part to support the ins pending colum of blood and to counteract the effect of gravity. Hence the vessels of the new formed gra=nulations being weaker than those originally formed are un=able to support the colum of blood when we walk or stand erect. and this is the reason why in ulcers of the leg the blood some=times burst the vessels of the leg. in other the vessels do not give way yet the parts are too weak to carry on the circu=lation and the sore becomes of a livid colour, owing to the stagnation of blood. by a rupture of the vessels the inflamation is increased and the sore discharge a bloody serum. in this state of weakness the part may be stimulated with camphorated spirits or even alcohol. if the vessels become varicose use a roller. when a rupture of the vessels take place a bloody serum or mucus is thrown out which act as an irritant to the new and tender granulations. Inflamation comes on and the secretion of good pus is diminished. if this discharge be not soon stopped the granulation slough off the symptoms return and the sore is intarged. the best cure is an horisontal position. the patient should be confined on his back in bed and be kept perfectly at rest.

When this cannot be accomplished bandages should be applied which is the best cure in ulcers of the legs, it prevents any over distension of the vessels.

Bandages are of three kinds

1st the Laced Stocking

2 & 3 strips of leather, muslin, linen or linen spread with adhesive plaster, the cotton are preferable.

a laced stocking would answer every purpose but it is too difficult to obtain. the use of a bandage is when we walk to prevent the vessels being over stretched by the blood the second impediment to the cure of ulcers is oedema. this is proceeded by adhesive inflammation which forms the base for the granulation by uniting the cells of the cellular. the watery part of the blood is thrown into the cellular membra=ne distend the sides of the sore and putting the sides of the vessels on a stretch. but being rendered more compact by the adhesive inflamation, cannot give way to the distending force which presses against the granulations and if the distension be long keeping they will slough off. oedema generally subsides at night and the injury done during the day then repaired. in this way it will often continued some time while the oedema destroys by day what it removed by night. in the cure rest and a horizontal posture are necessary. if this is not sufficient

When this cannot be accomplished bandages should be applied which if the bad case be above of the leg, will prevent any ordinary distension of the vessels.

Bandages are of three kinds

1st the Roll bandage

2 & 3 Strips of flannel, muslin, linen or lawn cloth called triangular. The latter are preferable.

A tight bandage should cover every varicose vein in the affected limb. The use of a bandage is rather an evil to prevent the vessels being over distended by the blood the valves intervening in the case of varicose veins. This is prevented by applying compressing strips from the toes for the varicose veins by unloading the coil of the cellular tissue from of the blood to thinner parts the cellular vessels =ous enlarged the limbs of the arteries and putting the tissues of the vessels on a stretch. but being accompanied more complete by the relaxing influence consequent on a rest to the distending force. Attend against the varicose and of the distension to keep up the coil always off. Valves generally subsides of weight and the tissues those during the day have collected. In the day it will often continued when while the relaxing therapy by day which is counteracted by weight. in the case leg and so long as varicose veins are necessary if there is not sufficient

a roller must be applied. some authors advise the patient to take a degree of exercise after the application of the bandage it is certain the parts will heal speedily sometimes under this treatment. but I believe much sooner if the Patient is kept in quietude. the situation is a matter of consideration, the bandage should be applied in the morning before the patient rises and consequently before the leg swells. the third impediment is that methode of treatement which some Surgeons call Dressing to the bottom, it is by pressing lint or other substances down to the bottom of the sore. this is a very hurtfull practice as it must rent the uniting part and keep them asunder and consequently prevent them from healing. all such dressing act precisely in the same manner as a pea in a issue. I might rept enumerate different powders and salves &c but it is unecessary. I may just mention however than all stimulating salves are improper they either bring an inflamation or by their quality act as corrosives. by removing those unecessary dressing we put the sore in a state for healing. this way of dressing to the bottoms, was the ancient mode of treating fistula in ano. whatever impairs the constitution, independant of specific disease is an impediment to the cure of ulcers. the use of spirituous liquor act in this way, as we see ulcers in the people who are frequently intoxicated are very difficult to heal, hot or cold weather retard the cure of ulcers. I have seen an ulcer as large as the

palm of my hand resisting the treatment for six months cured by a fever in three days. The simple strenght of the constitution has been supposed to have an effect in the cures of ulcers. observation proves the truth of this in general as the parts are able to go through their operation better, though I think I have seen them heal equally well in both constitutions.

Irritable Ulcers

Those are ulcers (spoke by different authors) which you will find situated about joints and tendenous parts, as the fingers tendons ~~passing~~ the tibialis anticus, the Patella and on those tendons passing over the ankles. the difficulty of curing them arises from the irritation which is excited in them by the action of those muscles which belong to the tendons over which they are situated. now the best means which I have found of obviating this irritation is by applying a splint to the limb in such a manner as to prevent the motion of the joint where the ulcer is found this keeps the part at rest and the ulcers heal readily by the usual remedies. I shall now speak of different kinds of old ulcers and under the following heads. 1st of Inflamed ulcers. these are known by their pain & soreness and swelled edges and are accompanied with increased heat; the pus changes or instead of pus they discharge some thin serum and other matter which has a purulent appearance and coagulates over the surface of the sore adhering closely to the granulations —

Treatment

if there be such an inflamation present blood letting purging &c are necessary. bread and Milke poultices are the best applications to the part the patient should be kept in bed. when the patient is too weak to admit of evacuation and the ulcer is situated on the leg the foot should be raised to favour the return of blood. this act as a local depletion and without depriving the patient of blood.

I have seen this accelerate the cure immediately when the inflammation has subsided it may be considered and treated as an ulcer in any sound part

Fungous Ulcer

these have large granulations with round tops which are above the surface of the other part and have no disposition to heal or form skin. and sometimes have great sensibility and bleed from the slightest touch, in others there are little or no sensibility

Treatment

these may with a simple compress and secured with a rolled which presses the granulation together and prevent the growth of the fungus, if this is not found sufficient, the excrescences may be destroyed by lunar caustic, arsenic sometimes answered the same purpose.

Œdematous Ulcers

in these there an effusion of serum in the cellular membrane. the granulations become of a purple colour, if the patient's strenght be so much reduced evacuations will be improper. the Œdema can frequently be brought down by strips of adhesive plaster and raising the leg to an horizontale posture. if this does not answer it may be remedied by means of a roller which should be wound from the extremities upwards.

Sloughing Ulcers

In these the sloughing frequently arises from a weakness in the granulation.. in some old ulcers when the granulation have arisen to a level with the sound skin they becomes a purpureal black colour, mortification come on and the part slough. sometimes mortificatication does not stop even at the edges of the sore, but goes on sloughing at one part while skin forms at another. in general mortification take place over the whole surface of the sore. this is generally attended with febrile symptoms. but if the granulation do this through weakness they should be dressed with a poultice combined with laudanum. the part are generally very sensible of the least irritation. ulcerations sometimes come upon both legs at once. one breaking out when the

the other heal. This proves than it does not depend upon treatness of the constitution or both sore would be affected alike. in these cases from treatness we should use bark, opium, nourishing diet &c when the mortification has stoped, carrots greated and boiled in milk may be applied to correct the fator the fermenting poultice mixed with powdered charcoal may be applied. Sometimes when mortification is going on exceasively maggots may be formed (especially in warm weather) in the dead parts. To obviate this the dead parts are to be washed over with nitric or muriatic acid diluted in equal parts of water.

Treatment

I have found the application of a blister over the ulcer an excellent remedy in stoping the progress of Mortification the gastric juice has also been highly recomended in such cases but I can say nothing of it from my own experience. I shall now treat of Ulcers than occurs not unfrequently in weakly constitutions. They generally look well at first, the granulation form rapidly and generally raise to a level with the true skin, but our hopes are soon frustrated; for the granulation in a short time change their appearance and becomes of a purple colour and a part of them are removed by ulcerations. The patient should have nourishing diet and take the Peruvian bark. Cold water may be

poured on the sore for four or 5 minutes every day. a weak solution of Lunar Caustic or common salt put upon lint and applied has proved usefull. Citrin ointment has also been of service. Lint dipped in a solution of oak Gall to which laudanum has been added applied to the sore; has sometimes cured ulcers that have resisted all other remedies.

A remedy with I have also found useful in these ulcers was bread and milk poultice wet with the juice of common Lettuce.

Indolent Ulcers

When nature has been protracted frequently in her attempts to form a cure the parts become indolent and have no disposition to form a cicatrice, and when the inflammation is reduced to edges remains in a callous tumefied state. in consequence of the coagulated Lymphe not being absorbed when the inflammation was removed.

Treatment

The best plan of treatment is to remove the callous edges after the inflammation has subsided and so change the disposition of the ulcer to the same nature as that of a sore from accident. this may be done either with a knife or caustic, or it may be done in another

Heated on the stove for four or five minutes every day, a small solution of alum carbonate in common salt and water has applied her powerful results. Often recurrent has also observed cures, but applied in a solution of salt and water has been added applied hourly for thirteen days after these have ceased all other remedies.

Of course with heavy ulcers should be done also not been so much profitable and with the juice of common Sphinx.

Indolent Ulcers

When ulcers for some protracted frequently in her difficulty to form a cure the wash become indolent and have no disposition to form a cicatrice, and when they in flammation is reduced to edge remains in a yellow thickened state in consequence of the irregulated quantity not being adjusted when the inflammation has ceased.

Treatment

The best plan of treatment is to remove the yellow edge after the inflammation has subsided and so cleanse the surfaces of the ulcer to the same healthy or tissue of a more florid color. This may be done either with a knife or caustic, or it may be done in another

way (viz) by means of a bandage and pressure. Mr Bayton say that adhesive plaster will mostly answer. When the caustic is employed, we should proceed in the use of it to the midle of the sore and sometimes over the whole sore until the ulcer put on an healthy aspect. taking care after it begin to heal not to apply it near the edges or we shall by means destroy the granulations and prevent the cure by making the ulcer larger. Under this head I shall speak of the application of mercury.

Mercury is sometimes very usefull in curing sore given in small doses. but if this is found insufficient we should increase the dose sufficiently to create a gentle ptyalism. the Tincture of Myrrh is sometimes used or we may apply a solution of lunar caustic to the parts or it may be sprinkled with red precipitate, or a decoction of walnut leaves and dressed with unguentum citrinum. &c

Carious Ulcers

there the dead part of the bones becomes a stimulus to the absorbants to separate the dead portion. I do not pretend to enter into a discussion of the causes that produce exfoliation of the bones but I may observe than

as soon as any portion of bone become loose it ought to be removed immediately if possible. but when the bone is situated in the more fleshy part it is difficult to determine whether it is loose or not especially if the piece be large. it may however be discovered by the introduction of a probe if the bone been light no pain will be felt on pressure with a probe. it is best to put a piece of wax on the end of the probe to prevent the point of it injuring the side of the wound. but if the bone be loose great pain will be felt on pressure or only light touching in consequence of the dead part being pushed upon the new and sensible granulations: if blood follows, we may believe the dead portion to be loose. if the bone be loose in order to extract it, it will be frequently necessary to make an incision done to it for the extraction of the dead portion. a sponge tent however often answers to dilate the orifice effectually. this should never be delayed when practicable to remove it for granulation to take place, forming a substance of nearly the consistence of bone. which increasing the dead parts prevent its removal. sometimes the piece exfoliated is so large to admit of an incision being made sufficiently large for its removal because if we divide the vessel in so hard and callous a part it will be very difficult

a stone or any portion of dead tissue leaves a cavity to be covered immediately if possible. But when the bone is situated in the nose, clearly that it is difficult to determine whether it is bone or not particularly if the pieces be large. It may however be discovered by the underturn of a probe if the bone been light in case will be felt on pressure with a probe. It is best to find a piece of bone on the end of the probe to prevent the point of it pressing the side of the nasum. But if the bone be loose pass for this will be felt on pressure or only light between on pressing some of the dead part being pushed before the new and healthy granulations of blood pattern, we may believe the dead portion to be loose. If the bone be loose in order to extract it, it will be frequently necessary to enlarge an incision bone to get for the extraction of the dead portion. A forceps that however often cut when to detach the orifice effectually. This should always be done when practicable. If necessary for granulations to take place, forming a substance of nearly the same texture of bone. Which in covering the dead part for ever to succeed. Sometimes the piece exfoliated is too large to come out on an incision being made sufficiently large for it. However because if we divide the nasal in to two and follow a part it will be very difficult

to take them up. To avoid this it is better to break the bone with a strong pair of nippers after which the pieces can be readily extracted. in

In a case of carious ulcer of the lower jaw which irritated the masseter muscle to contract so than the mouth was kept closed cartilage was formed in the same manner, so that the jaw could not be opened occasioned the carious bone. The Surgeon not understanding the case sent the patient to the city to have dissected supposing an adhesion of the parts had taken place.

Varicous Ulcers

these are caused by varicous veins and very much resemble ulcers of the indolent kind the vena saphena most generally becomes varicous and prevents the ulcers from healing. they may be often remedied by light bandages or a laced stocking. but this is necessary to be continued so long than the patient is tempted leave it off too soon, before the cure is complete. this may be superceeded by an operation performed by tying a ligature round the vein so as to take off the column of blood. this practice was revived of late years by Mr Hunter and afterwards by Mr Home.

I shall read you the treatment by Mr Home in performing the operation he recommend the patient to stand on a table on which is placed a chair and lean over the back of it in this way the vein will be completly distended with blood; and the ham will be at a convenient height for the Surgeon but in this situation it is difficult to get the Light to fall on the part and the patient not knowing the pain attending on it is mostly restless and discontented. I therefore apply a tourniquet upon the thigh so as to compress the vein without the arteries by which means they become distended and the operation can be easily performed. the veins may be tied up in the ham in order to do this the Surgeon must pinch up the Skin, the Skin so raised is to be divided over the vein a Silver needle with a blunt point is to be armed with a ligature and passed round the vein and the patient placed in a horizontal position before the vein is tied to free it from all blood. I apply a small piece of linen rag on the vein directly under the knot formed by the ligature so that when the sides of the vein has united the ligature may be cut away without injuring the vein. in common the ligature may be cut away about the tenth or twelfth day. but it is not necessary it should remain so long. after the ligature is secured the edges

I shall send you the treatment by all Horses we are performing the operations he recommend the Patient to stand on a table on which is placed a chair and then one leg bent of it in this way the veins will be completely distended with blood and the veins will be at a convenient height for the operation but in this situation it is difficult to put the ligatures on the part and the Patient not knowing the veins entirely are it is usually taken distributed. I therefore apply a tourniquet upon the thigh so as to compress the veins without the arteries by which means they become distended and the operation can be easily performed. The veins may be tied up in the thigh in order to do this the surgeon must first tie up the vein, the skin is cut and it is dissected over the vein a silver needle with a thread passed is to be carried with a ligature and passed round the vein and the patient placed in a recumbent position before the vein is tied to free it from all blood. I apply a small piece of linen rag on the vein directly under the thread passed by the ligature, as then when the flight of the vein has ceased the ligatures may be cut away without injuring the vein. In removing the ligatures may be cut away since the truth or falsehood day but it is not necessary to should continue to long after the ligatures are removed the edges

of the wound may be brought together by adhesive plaster and a pledget of lint applied so as to press upon the vein above and below the ligature. if the vena Saphena be divided both branches. a/ it secured. sometimes both trunks of the vena Saphena are affected and requires to be tied. but it will not be necessary to tie both when only one is affected

Dr Physick says he has performed the ope=ration, but he found the ulcer was not much benefitted by it the veins are at first diminished but they soon enlarge.

The Eighth Species of ulcers are caused by local and constitutional circumstances and continued by a peculi=ar diseased action as in venereal ulcers cancerous scrophulous &c these may be remedied in two ways

1st those which are entirely local, may be cured by cutting the diseased part out with a knife but if one speck is left after the operation, as in venereal bubos cancers &c the parts spread like a ring worm and requires the frequent use of caustic

2 When the continuation of the ulcer depends upon any constitutional injury, that injury must be removed before the ulcer can be cured. Dr Physick says I have found the terra japonica powdered and sprinkled over the ulcer do much service.

of the Inward way be thoroughly superseded by a Thoroughly Healthy and a Healthy of Kind of Diseases. It is not yet known the bone above and below the Injurious of the new Diseases to Humanity both Internal and Internal Sensations both Health of the Nerves are affected and Impossible to be Healed. But it will not be necessary to the health only one is affected

Dr. Squirrels says he has professed the Sensations, but he found the water was not sufficient by it. The Nerves are of Kind Diminished but they have no change

The Eight Classes of Nerves are caused by local and Constitutional Consumers and Causes by a Local = or Situated Below or in General when Consumers Very Below

It. These may be Cured in two ways

1st. These Illness are Entirely Local may be Cured by Cutting the Nerve Quite and with a Knife but if one Object is left off the Operation, even Nerves Under Cancer if the Part affected Still a Cure Impossible the Frequent use of Cauterio

2 When the Continuations of the Nerve Feelings upon any Constitutional Injury These Injury must be Removed before the Nerve can be Cured. Dr. Squirrels says it have proved the Injurious Consumers and Affected Nerve the Nerve Sensations.

On Fractures

On Fractures

A fracture solution of continuity of a bone occasioned mostly by external violence, but this however is not always the case because the patella is sometimes fractured in consequence muscular action, and the os humeri is sometimes fractured in the same way.

Bones are said to be more brittle in frosty weather, because slight fall in cold weather produce fractures and therefore it is said they are more easily broken in cold weather than in warm. but I think another circumstance, the contraction of the muscles easily contribute to this end. for instance when we pass over ice the muscles contract with vehemence and a sudden slip or fall occasioning them to act with greater force or violence produce a fracture.. this is proven by intoxicated persons who seldom broke any of their bones by slipping or falling. which is owing to a greater relaxation of their muscles. if a bone be broken obliquely it occasion great pains on account of the sharp edges of the fractured extremities piercing the soft parts and causing convulsive action of the muscles. and when cured the limb frequently shorter than the another.

The limb readily admits of flexion and extension of the injured part and is often distorted crepitus may also be perceived.

fractures are either simple or compound

a simple fracture is when the bone is broken without any communication ~~without~~ externally.

A compound fracture is when there is a decussion

of the surrounding part, so as to admit of external communication with the cavity of the fracture; if the external communication be small it frequently heals by the first intention, similar to a simple fracture and has been termed a simple compound fracture.

Simple fracture

In the treatment of simple fracture of the extremities the limb should be placed in a state of relaxation and the ends of the bones into their exact position. in general the convulsive action above mentioned ceases when the limb is reduced this in general is easily effected, but when it cannot be accomplished by ordinary means the patient should be bled ad deliquium animi. if inflammation supervenes it should be reduced by bleeding and the antiphlogistic regimen. as purging is very inconvenient, they should only be employed sufficiently to keep the bowels open. the limb should be kept in its position by means of splints and bandages. the bandages should be applied very tight at first. splints are stiff, firm substances and of four different kinds, wood leather whale bone and pasteboard, of these the last is preferable because they can be moulded to any figure by wetting them in hot weather and adapting them to that part and when it becomes dry it maintains its figure

We are very often not called to the accidents till several days after it has happened; and considerable

degree of swelling and inflammation has taken place. This should be removed before we attempt the reduction of the limb, the bleeding low diet and the application of lead water poultice; as union does not take place where much inflammation is present. I may venture to propose this as a general rule, than at the end of 8 or ten days after the first dressing we should always examine the parts if any displacement has taken place and a allevation necessary you may make as much as you please. The Patient should be kept to a low diet and submit to evacuations, by venesection in proportion to the inflammatory symptoms. I prefer this mode of depletion to purgatives as the latter is attended with much more inconvenience. If the Patients constitution be unhealthy or weak it may not be necessary to evacuate at all the dressing at first should be applied loosely, or else if the limb swell the circulation will be stopped and so produce mortification. The time necessary for healing the fractures depends upon the age constitution and place of fracturing like wise upon the size and situation of the bone the bones of young people heal sooner than those of the old.

The fractures of the ribs and ribbs heal sooner than those of the fibula, the bones in some constitutions does not unite at all but forms a kind of joint and in fact the ends of the bones are sometimes tipped with cartilage and have a sort of capsular ligaments. Two cases of fractured legs of this kind we cured in this hospital by moving the broken limbs, so

that the extremities of the bones might rest against each other, this was effected by causing the patient to support himself on crutches and moving about to bear as much weight as possible upon the injured limb which irritation seems to cause the process necessary for the formation of bone to be put into action.

The action very much accelerates the union, the adhesive inflam-mation is produced, coagulating lymphe is thrown out which soon become vascular, then cartilaginous and lastly forms bone itself. Mr Hunter says when the bones do not unite we should make an incision down to them, but does not tell us of his having such a case. it has been recommended to make an incision down to the bone in such cases and amputate the ends of the fractured bone, in the same manner as in wounds of the joints but this is a very dubious, painfull and terrifying operation and can-not be performed in all cases. as in fractures of the leg and forearm, I would either advise to pass a seaton through the fractured ends of the bones, which is a much simpler me-thod and attended with less pain, less inflamation and can readily be performed in any situation. I have perfor-med the operation in this manner with very good success.

it was done by passing a needle armed with a skin of silk between the divided ends of the bone, this by irritating the parts caused inflammation, suppuration and granulation and in twelve weeks the patient complained of much more pains in bending the arm at that place. these granulations

soon united leaving only a small hole of the seaton which healed in a few days after it was removed.

in old people it should be kept in a longer time for it appears to me that part around the bone begin to form first.

Simples fractures mostly unite by the first intention union of the bone requires more time than the union of the fleshy part. the coagulating limph first becomes vascular then cartilaginous & then bone. in this way the substance called Callus is formed which being of a larger diameter forms a tumor round the bone at that place but is generaly diminish becoming less and less till it differs but little from the bone itself, at first the granulation are full of vessels. if the wound be simply inflam=med union by the first intention fails suppuration and granulation supervene and the granulation when examined are found only to be vascular at the extreme points, the other part being of the nature of bones.

Compound fractures

The first bound of union is lost in compound fractures as the blood which effect than union escape through the exter=nal orifice. compound fractures sometimes partake of the nature of simple incision but much oftener, however, they are punctured, lacerated or contused, the fractured ends of the bones being so blunt as to tare the soft parts; again the soft parts are very much bruised, and the bone broken in several place by the mechanical force applied when it has been run over which a wagon or any heavy body falling upon it. fractures may be oblique, transverse or spiral, com=pound fractures is sometimes attended with profuse hemmorhage. When much blood issue from the wound we should apply a tourniquet on the principal artery. When the blood is thus stoped we should next determine whether the limb can be saved or not the Surgeon in those cases should be very cautious of is prognosis it is not for him to say whether the patient will die or not if the limb is not amputated. but he is to state the danger which will attend an attempt to save the limb. if it be so torn and strangled than circulation cannot go on to the extremities, Amputation must take place, it may be done immediately or you may wait till the soft part slough and then amputate than bone. If amputation be necessary

would prefer it immediately; as we sometimes by that means prevent tetanus and likewise the patient is more willing at that time to submit to it. In amputation sometimes considerable hemorrhage take place from the medullary vessels. Amputation it is said sometimes necessary on account of the hemorrhage which takes place. but this I believe is seldom necessary.

it sometimes happen that mortification makes it necessary to amputate the limb, this should not be performed while the mortification is progressing Dr Gooden mentions a case in which the stream of blood flowing from the medullary artery in the tibia was equal in size to a crows-quill, and as it run in a long canal in the Tibia. he proposed to make two perforations near the end of the bone with a small trephine which was agreed to and the artery by this means lay bare and secured by a perpendicular pressure. but I have found in amputation of the medullary artery, the column of blood effectually stopped by a cedar plug thrust in beside the artery so as to press the orifice completly together and left so for 8 or 10 days until the union of the sides had taken place.

If bleeding take places from any part of a compound fracture of the leg it cannot be stopped by another means, the femoral artery must be taken up.

When the inflammation is great it demands our attention for if it be suffered to run on to suppuration the

patient will be generally weakened by the discharge of matter his constitution becomes much emaciated and hectic fever comes on, when the discharge is very copious and hectic fever has taken place amputation is advisable.

In compound fractures we should endeavour to remove the splintered portions of bones when they can be discovered if it can be readily accomplished, but if the pieces are attached so as to occasion much pain in extracting them we must omit it untill the process of exfoliation has completly taken place it sometimes happens that the external communication is very small so that the blood coagulates in the orifice and completly stop it up. and renders the cavity perfect, so that the bone unite as in a simple fracture but though too much officiousness with a view to assist nature the Surgeon should be so very carefull as to wash out the coagulum the fracture will be rendered a compound one and go through the process of suppuration & granulation. if the external orifice be very small a portion of dry lint may be bound in it which will become wet with the blood, then dry and form a scale after the bones are reduced, when the ends are not splintered the edges of the wound should be brought into contact and secured by means of adhesive plaster

I had a case of compound fracture of the tibia where the ends of the bones had made their way through

the contiguous parts. the incision was an inch and a half in length notwithstanding it united as a simple fracture and the patient got well in about six weeks. if the inflammation run too high it may terminate in mortification. to prevent this occur=rence from inflammation we should bleed and apply bread & milk poultices. the bleeding should be practised as it is indi=cated, some surgeons are fearfull of large evacuations at first on account of the copious discharge, than take place fear=ing they shall reduce the patients symptoms too much, not recollecting than the inflammation which proceeds it is the cause of the discharge matter. but it is necessary to distinguish be=tween mortification caused from inflammation and than which proceeds from weakness. if it be occasioned by weakness Opium bark wine should be administered. if mortification be brought on by inflammation in compound fractures ap=ply a blister. it will here be necessary to distinguish be=tween mortification which is produced by the part being killed by in consequence of the violence applied, and than which is the effect of inflammation induced by violence; as the parts in the first having lost their life, must necessa=rily slough. bones cannot bear a great deal of inflam=mation without loosing their life

Fracture of Particular bones

First of the bones of the nose. these bones though not so frequently as others are nevertheless sometimes broken. sometimes the fragments are pushed into the cavity of the nose which occasions a difficulty of breathing. when broken in this manner they may be reduced by introducing an armed spatula or some thing of the kind into the nostril and when reduced it may be retained in its place by a gum elastic catheter if necessary if the project outwards they may be retained in their place by applying after they are reduced, they may be kept so by means of leather straps spread with adhesive plaster, if the soft parts are injured apply a bread and milk poultice attention should always be paid to injury of the bones.

of the lower Jaw.

fractures of the lower Jaw sometimes occur at the simphisis; but most commonly at the sides and in one side only, though sometimes they happens in both at once. they occurs most commonly between the chin and processes. the coronoides process are seldom broken because they are so well defended by muscles, and I never saw but one fracture of the condyle. we can easily tell when it is

it is broken, through the fragments be ever so little misplaced by rubbing the finger along the bone it will cause pains and the patient cannot press the jaw again the other. when the fragments are displaced if we look into the mouth the rows of teeth are uneven and when the fracture is on both sides the digastric muscle will draw down the symphisis while the temporal muscle draw the angular part upwards

Treatment

Some Surgeons advise peces of pasteboards to be applied to the Jaw, to keep it in its place, but the upper Jaw acts as a Splinter to which the lower one may be fixed by a roller, apply the teeth directly together having the row exactly over each other and confining the Jaw with a roller; that which is mostly advised is that which has four heads, applying the body of the roller over the anterior and under part of the Chin, then drawing two heads upwards directly over the top of the head and the other two heads from the anterior part round the occiput and forehead alternately. I prefer a simple roller it will answer every purpose. The patient should be kept upon Spoon food, and forbid all speaking and should not move his jaws for several days, the dressings should be continued for the space of three weeks by which

time union will take place not unfrequently the teeth are loose under this circumstance some authors have advised to extract them. this should however on no account be done for fear of making a compound fracture, compound fractures of the lower Jaw are mostly accompanied with carrie of the end of the bones.

Bones of the Spine

When bones of the spine are injured the consequence to be apprehended are serious. when the spine is wounded there is always an extravasation of the blood from vessels of the part which extravasation preses on the spinal marrow. some have advised an incision down to the bone to discharge the effusion but as it is very uncertain whether it be posterior or anterior to the spine (and if the fracture be internally it cannot be of any use) I should not advise it. when the injury takes place in the neck above the third vertebra which is commonly does the patient shortly dies (about the third day) a paralysis of the lower limbs comes on and likewise of the bladder so that the patient cannot void urine, nor scarcely faces, and breath with difficulty as it is only the diaphragm which caries on respiration.

it is dangerous to lay the patient on his face for any length of time, as thereby the pressure on the abdomen would force the abdominal viscera upwards and prevent the

descent of the Diaphragm. if the injury happens lower down the patient may survive a longer time, but I never knew a case of this kind from which any one recovered. the patient is compelled to lay on his back and the parts on which he lies mortifies.

When injuries of this kind occurs in the neck distention has sometimes proved serviceable. though this is almost always of no use yet for the satisfaction of his friends we may put it into trial. to this effect we may pass two bandages round his Head one from under the Chin over the top of his Head, the other from the occiput round the fore part and secure them together an instrument is then formed being operated when it rests on the shoulders and having a screw at the top and a hole directly in the piece under the screw to admit the end of the bandage in this manner the extension is made against the shoulders (previously having put a pad on both.) by stretching the bandage in consequence of turning the screw above, another measure methode is by trying the feet of the patient to the foot of the bed and the head to the head of the frame and then applying distention having a hole in the bed opposite to the anus for a convenience

The patient in the hospital appeared to die in consequence of Mucus collected in the trachea and obstructing respiration, owing to the expiring force being destroyed.

the Bones of the Pelvis are seldom fractured owing to their great strenght, though I once saw the dorsum spilt trought. the patient cannot stand up, suffers great pains; conveying a sensation as if he should fall to pieces. upon motion of the parts a crepitus may be perceived.

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Treatment

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Fractured Ribs.

The ribs are seldom fractured at once. the most com-
mon individually. some times four or five are fractured at
once. The most common cause of the fractures of ribs are
fall or substances falling on us.

I have seen many from the falling of masses of Steel.
fractures of the ribs are commonly attended with great pain, when
the patient takes a large inspiration. a breaking cough is mostly
a concomitant symptoms. by applying the hand on the side
the patient cough, the crepitus may readily be perceived and
if the lungs be wounded the patient expectorate a bloody
mucus and air pass into the cavity of the thorax. this if seen
it takes place in a small degree is of no consequence. there will
be a small irregularity or angle at the place of the fracture.
if you press on the angle it is of an irregular shape and
give a cracking noise, sometimes a swelling of the body
takes place Emphysema it is occasioned by the air passing
from the lungs into the cavity of the Pleura, which at every
expiration issue into the cellular substance and sometimes ma-
kes its way into the whole body. When the Emphysema is
partial a cloth wet with brandy may be applied to the
Emphysematous part and confined by a roller. Dr Hunter
has published an account of the treatment of such cases

in the second volume of the London Medical observations which I would advise you to read. it sometimes becomes necessary to make a puncture into the cavity of the pleura to discharge the air. when this is done it should be made between two round ribs midway between the Sternum and Spine or else we may let the air to the fracture and convert it into a compound one for though it is in reality a compound fracture yet it frequently happens that the wound in the lung is so small than the bones unite like a simple fracture.

The air in the cellular texture may be let out by puncturing if it becomes necessary though it never produces inflammation as I showed upon treating of wounds.

In the treatment of fractured ribs a wide bandage should be passed round the thorax so as entirely to prevent the motion of the ribs, if great inflammation intervene treat it as a peripneumonia. wide bandages should be passed round the thorax to prevent their slipping down for the cough which often remains for sometimes, the patient may take a spermaceti mixture, or a solution of Gum arabic in water combined with laudanum. Sometimes small doses of laudanum are very serviceable. in about three weeks union will have taken place between the fractured ends and the ribs.

# of Fractures of the upper Extremities.

and 1st of the Clavicles

The Clavicle is mostly fractured about the middle and it generally slooped from the Scapula inward and downward. when it is broken in the middle a displacement of the Scapula frequently take place downward and forwards with scarcely any displacement of the sternal part the former most commonly being below the latter, the weight of the arm cause the first and the pectoral muscle the latter. with respect to the lenght of the bone its shortness may be attributed to the action of the pectoral muscle. if the Clavicle be broken within the ligament at its connection with the coracoid process it cannot be displaced and is frequently over-looked by the surgeon. this circumstance should be very well remembered for by being overlooked, the little it is allowed may prevent its healing and produce an abcess and thereby cause a compound fracture.

but if it be broken in the middle the crepitus may easily be felt up, causing a motion of the arm. a patient with a fractured Clavicle cannot raise his arm and likewise the shoulder on the side affected will be much lower than on the sound side.

Of Fractures of the upper Extremities

Part I^st^ of the Clavicles

Treatment

The treatment of fractures has been generally improved by Dr Desault. formerly the used in case of fractured Clavicle to set the patient on stool and cause an assistant standing behind him to place his knees between the shoulders of the patient and take hold of them with his hand to pull them back for the purpose of making extension, compresses were then applied under the arm and a bandage passed round the shoulders and under than of the other in form of the figure 8 and the patient hand supported in a sling, but in this treatment there is nothing to prevent the pectoral muscles from drawing the scapula fragment under the sternal one. I believe this is the present treatment in England and which I have frequently seen tryed there but with very little advantage. this practice is in short of little service and is attended with one very serious incon=venience viz. ~~extension~~ ulcerative of the axilla I shall now speak of Desault ~~methods to prevent~~ the prevent the scapular part from passing below the sternal one. a pad should be applied under the arm and secured by a roller. this roller should be passed several times round the body to prevent its slipping under the other. the pad may

be of muslin or flannel. the latter is preferred or of wool horse hair &c. another bandage is to be applied round the body to prevent its slipping. the Pad enable the arm to act as a lever to the clavicle and effectually prevent one fragment from slipping under the other. the pad may over the arm drawing the elbow close to the body to keep up the extension of the Clavicle it may have one or two round the wrist to support the weight of the fore arm; or a strip may be passed round the wrist and pinned to the other bandage to support its weight. a piece of soft linnen or flannel should be applied between the wrist and body. the weight of the arm should be supported next for this purpose an assistant should take hold of the Elbow and press the arm upwards. this done a bandage should be applied round in form of a figure 8 beginning as follows lay on the breast, pass over the fractured arm under the elbow and over the same again then a cross the back under the other axilla across the breast and so on the fractured bone again pursuing the same course as before. we should then feel the pulse to see if the circulation goes perfectly on. the bandage should be continued about 4 weeks by which time, the union will have taken place; though I would advise to continue then one week longer; as the union would consequently be very weak.

Fracture of the Scapula.

The symptoms of a fractured Scapula are a drooping of the shoulder, pain and crepitus. The acromion process is sometimes fractured though not very often but when this does take place it is to be treated exactly after the same manner as the Clavicle. it may be replaced by pushing the arm upward the fore arm may be laid on the humerus and the bandage passed as before mentioned the dressing should be continued about six weeks. I have never but once seen any other part of the Scapula fractured and that was nearly at its inferior angle and fractured transversely from the base to the inferior and ~~then~~ when the Scapula moved the low fragment remained still. when fractures of this part of the Scapula occur and when the lower angle is broken off it is drawn a little downward and forward by the action of the Serratus major anticus muscle and cannot be pushed upward while the Scapula is drawn upward by the teres major. To remedy this the hand should be brought forward to the other shoulder which draws the Scapula round, so that the broken edge may be brought in contact with the fragment. a bandage should be passed round the arm and shoulder to secure the motion of the arm and keep it in this position and so prevent its moving the Scapula

Fractures of the os Humeri.

This is most frequently broken about the midle, when fractures happen about this place there is no difficulty in ascertaining their situation the patient cannot raise his arm nor raise it in any degree it likewise bend in any direction and if extension be made the crepitus may be readily heard and felt. an assistant should sieze hold of the condiloyde, bending the elbow and drawing it a little from the body to put the muscles in as greater state of relaxation an another assistant should take hold round the patient under the axilla to make a counter extension or take hold of the opposite arm. the surgeon should take hold of the opposite arm and place the bones in contact. this being done a roller should be applied round the arm from the elbow to the shoulder the lenght of the splints it should be pretty light making a moderate pressure though not so light as to stop the circulation. the roller should be applied from the hand to the shoulder and the splints are sufficient to keep the fragment in their proper places, four should be used if the arm is very large there should be of paist board. the splints should be secured by another bandage the fore arm now remains to be supported this is done by a sling or by passing a roller round the

Fractures of the Os Humeri

body having previously made a compress or pad to apply under the arm for the purpose of making the side level for the support of the arm. The bandage for the support of the fore arm begin at the opposite side passing over the hand over the elbow and round the body and pursuing the same course again at the end of ten days we should examine the limb the union at this time will be so soft than if any displacement should have taken place it may easily be remedied at the end of four or five weeks we may omit the bandage generally. if the fore arm swell much we may wrap the bandage from the end of the fingers this is however seldom requisite. Sometimes the os humeri is fractured near its head the patient in this case complains of pain upon every motion of the arm pressing the arm against the side causes pain. The lower fragment in most cases is turned inward towards the thorax. I never saw a case where it was either before or behind. if it turned inwards the elbow stand off from the body a pad should be applied close upon the axilla between the arm and side to keep the bone in its right situation.

Fractures near the head of the os humeri have been taken sometimes for luxation and by trying to reduce the supposed luxation much mischief has been

done by irritating the wound and the surrounding soft part so as sometimes to produce suppuration. this mischief may readily be avoided by placing the finger in the axilla when we shall be able to feel the fragments instead of the round head of the bone. Sometimes when the lower fragment keeps its situation and the patient cannot use his arm, we are not able to tell the precise place of solation, but by extension and counter extension being made the crepitus may be felt by bending the arm. it is of great consequence to ascertain whether the humerus be luxated or fractured, for if the latter and the lower piece turned inward the patient cannot rotate his arm when it is healed in this situation.

Treatment

In fracture of the head of the bone begin the bandage at the wrist and wind it to the shoulder after the extension and counter extension has been made the splints should then be applied two or three will be sufficient if they are broad but if they are narrow apply one before one on the upper and one on the under part of the arm. these are to be secured by a roller. the lower fragment is to be kept out by a pad which is best made of a piece of flannel

folded up and placed under the arm this will answer instead of a splint. this being done the arm is to be bent at the elbow and secure by a broad roller. I prefer a roller to a sling as a sling admits too much motion.

In about four weeks the bones will be united though we should examine it in about ten days by which time the echymosis which frequently appears in consequence of the blood vessels being injured by the broken fragments will have com=pletely subsided and we are the better enabled to judge of the proper situation.

I once saw a case where there was so much echy=mosis than I could not feel the bone at all. Mr Desault advise when the effusion is great to make a free incision down to the fractured cavity and discharge the fluid. but this renders it a compound fracture which should not be done. the natural process of absorption will worthy remove it: if however at the end of three or four weeks it be not absorbed a small puncture may be made into the cavity to discharge the fluid. by this time the bone will have united and we shall avoid changing the fracture into a compound one as soon as the operation is done the edges of the puncture should be brought into contact by adhesive plaster so that the wound may be united by the first intention

Pulled up out of place and over the one the Log curves inwards
of a Joint the Bung bore the same is to be found at the elbow
and throws by a Bend Valve. If fitted a valve to a line
or a Long Bend for such water.

As a Bend from Fresh the bower will be matted Bend.
As a Bend from Fresh the bower will be matted Bend.
and should examine it on board the ship by British Bore the
contents before the worthy appears on surveyness of the Bend
matted bend matted by the Bower Pumps will have one
pump matted one be on the Bell. enable to judge of the
proper Situation.

Have see a rare when Bend tried to matted by
matted bend I could not find the bore at all. Mr. Bennett
matted bend matted the efforts a great to make a few matted
bore the efforts a great to make a few matted
down to the Bower carry one distance the Bung but
the sender it a consequence Fractures which should not be bore
the matted Bower of a bore Pipe will worthy remove it if
matted Bower of a bore Pipe will worthy remove it if
however of the one of the or bore Fresh it be not affected
a small upon other away & people with the carry to distance
the Bung by the time the bore will have matted one
the matted carry the Bower into a complicated
or bore or the Bower to bore the edge of the Bower
should be brought into contact by matting plate to
bore the bower away be matted by the first matted

The Humerus is also sometimes fractured transversally near the condiles and sometimes longitudinally at the same time so as to separate them. When the condyle are fractured in this way by taking one fragment in each hand and moving them backward and forward we easily perceive the crepitus if only one be fractured we may discover it in the same way. besides this the part are so thinly covered than the fracture may be easily felt. I have already said than where the elbow joint is concerned in the injury it is right to keep the arm fixed, the fore arm should be rendered incapable of motion and after the fragments are placed right a bandage should be placed round the elbow. beginning about the middle of the fore arm and extending up to about the middle of the arm. to fix the fore arm, splints should be applied in the shape of a L each forming right angle over the external one. then two more bent splints are to be applied one anterior and the other posterior. these splints are to be secured by bandages. the splints then extends along the fore arm should reach to the wrist. every motion of the fore arm displaces the fragments and must be prevented by a band round the body and arm. at the end of ten days we should take off the bandages and examine the limb, at the end of 10 days more we should take off the dressing again and flex the arm gently, after the 26 the dressing should be taken of daily and the arm flexed to prevent stiffness of the joint.

Fracture of the Olecranon

These are mostly caused by falls on the elbow and are always transverse when the olecranon is fractured the patient is not able to extend the fore arm because the biceps muscle which extends the arm is inserted into the detached fragment the upper fragment is drawn a little upward from its place by the contraction of the muscle and you may move it from side to side

Treatment

the fore arm must be extended and the portion being placed in its situation is to be secured by bandages beginning at the wrist and winding round to the shoulder. when the bandages have got near the elbow, the surgeon must feel if any portion of the skin as got between the division ends of the bone. the bandage is then to be continued on a splint should be applied to the anterior part of the arm to prevent flexion, after 10 days we may examine the state of the fracture and after the 20th day we should remove the dressing daily and gently flex the arm to prevent stiffness of the joint which sometimes happens. the dressing should be continued about fifteen days after till perfect union has taken place —

Fracture of the fore arm

The bones of the fore arm are frequently fractured and the radius oftener than the ulna, the ulna being seldom broken alone. the radius is most commonly fractured at the wrist, when the ulna is not broken with it. no difference here can be seen in the length of the radius, all the difference then can be seen will be an angular projection at the wrist. this is commonly so low as to be taken for a luxation. the surgeon will put the arm in a sling and union will take place forming an ugly projection and the patient cannot rotate the arm as usual. we may distinguish between fracture and luxation by a crepitus attending the former, but besides the crepitus (which cannot always be felt) we may know by the tubercule of the lower end of the radius not being opposite the styloid process of the ulna as usual. it sometimes happens however than both are broken in the same place. the crepitus may be felt, the arm bends at the place of the fracture. and there will be a lateral depression caused by the bones being broken together.

Treatment

to bring the divided surfaces into place an assistant should take hold of the Elbow another of the hand and make the necessary extention. while the extension is nearing

the Surgeon may replace the ends of the bones without any difficulty by taking hold of the arm and squeezing the flesh in between the bones so as to press them out, the inter ossus Ligament will prevent them being prened too far out. this being done a bandage is to be applied beginning to the wrist and extending it up to the Elbow. care being taken not to move the ends of the bones. two Splints should now be applied which should be wider than the arm and should be of firm material pasteboard without being wet answers very well. the Splints should be covered with soft linen and extended to the ends of the fingers. the Splint on the back part of the fore arm should be applied with the fore end below the elbow or else the patient will be punished every time this arm is extended. having care to keep the thumb upper most or else the patient will not be able to rotate his arm as usual if it be suffered to heal in any other position. at the end of about four weeks union will have taken place.

The Metacarpal

bones are sometimes fractured, two Splints are sufficient (after extension has been made by pulling the fingers) one on the fore part and the other on the back of the hand secured by a roller.

The Phalanx are sometimes fractured they are easily replaced and secured by four small splints one on each side one on the back and one on the fore part of the finger and a rolled placed round them.

Fracture of the os Femoris.

This fracture occurs most frequently about the middle or rather below it. sometimes above, sometimes at the trochanter and sometimes at the neck. if it is fractured at the middle and the fracture is oblique it will be considerably shortened the fragments of one portion passing over those of the other. in consequence of the contraction of the muscles. the patient cannot move his leg, complain of pain in the thigh it bends at the place and upon motion the crepitus is discovered besides the limb will be distorted, the toes turning outward and when one bone passes over the other it will occasion a lump with some tension at that place. the lower fragment is mostly under the upper one. the manner in which fractures of these bones have been treated are very various. I shall at present show the method which is most commonly in use now. The extension and counter extension being made by assistants, the bone is replaced

by the surgeon and short tufts of muslin placed under the thigh are brought over and made decusate each other at the top. a splint is then applied at the posterior part and another on the anterior part of the thigh. these splints are thin pieces of cedar or leather and secured by small pieces of taper tied round. one at the upper and one at the lower end. two bundles of straw or small bag of chaff are then to be applied one in the inside which is shorter and another at the out side and secured by a taper. to prevent the foot from turning out a bandage is fixed to the inn bundle passed round the foot and pinned to the outer one. this is now I believe the mode of treatment in London it is however a very inconvenient way.

Mr Pott supposed that the shortness of the limb which frequently occurred was owing to the muscles being in a state of tension when the limb was straightened out, he therefore changed the position ordering the patient to lie on the injured side and having the thigh drawn upward towards the body and the knee bent and thereby place the muscles in a state of relaxation but this will not be found to answer for often the ends of the bones will irritate the muscles causing them to take on contraction involuntarily and displace the bone. besides we cannot ascertain the length of the limb

since measuring from the anterior spinous process of the illium in this position is very inaccurate, again the posture is very uneasy and the patient cannot lie on his side so long. to obviate this it has been contrived for the patient to lie on his back and have his thigh and leg to rest on a machine somewhat like the roof of an house so than the muscle might be relaxed but here every time the bed pan is put under him the limb will be displaced to prevent this a son of Mr James Earle has contrived a bed with pullies to hoist the upper one which must have a round hole cut in the middle or opposite to the Anus to let the faeces pass through into the pan which is to be placed under the hole is to be filled with a cushion made to fit it, but this is a very complicated and seldom to be got and it is therefore impraticable. he has however made an improvement in the bandage having them shorter than in the above described manner. so than the limb may be examined by just opening them at the top without disturbing it. all these modes are now found to be inconvenient for securing a fractured femur.

The body naturally descend upon the lower extremities when treated in this manner as the patient lies in bed. Mr Desault has greatly improved the dressing for fractured thigh by the invention of a long splint. I shall now shew you Desaults treatment. the bed should be made of firm board covered with a matras and the patient

should have but one pillows under his head to prevent his slipping downward. There are several parts to this dressing
1st four tape strips laid one just above the knee one below it, one at the upper part of the thigh and one to the ankle.

2 a piece of Muslin or linen to wrap the splints in, this should be wide at the out side having the acute angle at the outer and upper side

3 strips bandage long enough to reach round the thigh laid with the edges in contact so as to lay on each other placed so as to reach from the perineum to the knee

4. a silk hand kerchief laid so as to come under the perineum and a cross the pectis to make a counter extension the patient should this be laid upon them upon his back

5 a splint of the length of the thigh to be placed on the anterior part of it

6 a small piece of leather spread with adhesive plaster and laid upon the perineum the hair being previously shaved off to prevent any excoriation from the counter extending hand kerchief.

7 another hand kerchief to be passed round under the heel and decussated at the top of the foot brought below it and tied to make the extension, the same caution is here necessary as in the perineum.

8. a short splint to go on the inside of the thigh and a long one on the out side for making the extension the extension and counter extension being made and the bone placed in their right situation the short bandage are to be wrapped the long splint now rolled up in linen placed for that purpose. it is to be applied to keep up the extension the excavated larger end goes under the axilla, the holes are next to receive the counter extending Handkerchief for securing it, the holes at the other end to receive those of the extending one after passing over the block which we see in viewing the splint edge way which is designed for keeping the foot in a straight line. the other short splint is to be rolled in the same manner to reach from the perineum to the sole of the foot. Notwithstanding the splints are wrapped in linen, there will be when they are applied, some bare cavities which are to be filled up with bags off chaff. these are to be laid between the splints and the leg and to fit nicely the unevenes of the leg to keep it steady and easy. chaff is preferred because it can be removed from one end to the other easily. the short splint is now to be laid on the anterior part of the thigh. it should be of paistboard and should fit the thigh the four pieces of tape are now tied round the splints in order to keep them still firmer a large bandage

is passed over the long splint and round the body two or three times which prevent any motions in this way extension and counter extension is kept up and the patient having many points to rest upon lying on his back he rest much easier than in any other posture. we should now examine the lenght of the limb if the fractured one be too short, increase the extension and when the bandage get slack they should be tightened. the ends of the bone should not be drawn in contact at first when there is a violent contraction of the muscles for it will cause great excoriation, but by keeping a moderate extension for a few days the muscles yield to the force and are easy overcome.

the splint now generally in use for keeping up the extension is not that originally proposed by Dessault but is considerably altered in its form. the one originally invented by him comes only to the upper part of the spine of the Ilium and extended a small way below the foot. the inconvenience resulting from the transverse position of the counter extension stay which almost always pressed the upper fragment outward, wanted remedying, I therefore lengthened the splint so as to reach up in the axilla, by this means the place for receiving the counter extending force could be brought to a straight line with the limb and by placing a pad in contact with the axilla a portion of the counter extending force might be supported and thereby prevent the

excoriation of the perineum. This is particularly useful in women whose urine is very apt to get under the draining and excoriate the part. When excoriation take place they may be washed with a little brandy. this I have found an excellent remedy. Sometimes fractures happen at the end of the femur, this may take place near the trochanter or near the round head of the bone or the head itself may be fractured within the ligaments the patient is sensible of the crack as soon as it is happen and cannot raise himself from the ground walk or stand. Though Mr Desault mention a case where the patient could walk, the fragments having became so locked. The foot turn inward seldom or never outward though it is said sometimes to do so. the Surgeon can pretty readily extend the limb if he is called in soon after the accident. but if a considerable time has elapsed more force will be necessary and I have sometimes been obliged to bleed ad deliquium animi, the extremities being brought into contact the crepitus may be perceived. There is another circumstance by which the extremities of a fracture may be found place your fingers on the great trochanter and rotate the limb if the neck of the bone be broken the rotation will appear to be on the axis of the thigh bone or as if the bone revolved on pivots, but if be broken lower down the axis will be thrown farther off and the trochanter will describe a much larger circle. the

Idea of the thigh bone revolving on a pivot will be strongest when the neck is fractured nearest the trochanter. if the limb be much inflammed we must decline setting it till the inflammation has abated. the fracture of the neck I believe heal as any other part of the bones unless when they occur within the capsular ligament. and I have seen an instance where a fracture of this kind did not unite in eight years.

as we cannot always ascertain exactly fractures at the upper part of the thigh it is right in all such cases to apply Desault's apparatus. it would be right to form the patient of the difficulty of union when fractures occur within the capsular ligament. or even in any part of the neck of the bone. the dressings should be continued 50 or 60 days Desault says. I have seen but very few fractures of the neck of the thigh bone, indeed I may say but one. in this case the apparatus was taken off at the end of six weeks, when the union was yet very soft. I think there only a sort of ligament had formed between the divided epiphysis. in any case therefore we should not continue the dressings according to Desault.

Contusions on the buttop are sometimes mistaken for fractures of the neck of the femur they may be commonly distinguished by the length of the limb being the

same.

Sometimes the femur is fractured lower down than the middle, occuring just above the condyles the lower fragment sloping obliquely upwards and backwards, when it is broken in this manner splints applied on each side are sufficient Desault apparatus answer this purpose completely. a thick compress should be laid under the leg to raise the lower fragment. Sometimes besides being fractured above the condyles are separated.

Fractures of the thigh bone of this place are easily ascertained. the thigh bone a crepitus are easy fell at that place, the patient cannot bend his leg and when the condyle are separated the crepitus may be readily felt by grasping the condyles with both hands and rubing them together I never but once saw a case of this kind and than was at the Hospital, but in this case the epiphysis of the upper fragment pared through the epiphysis a made a compound fracture. communicating with the lower joint and the patient shortly died. splints on each side are then sufficient.

I shall now shew Dr Harthorns method which is certainly very ingenious and sometimes answers better than Desaults. the principal object is to make extension and counter extension fall in a straight line with the limb and thereby avoid any displacement by the extension in

application of the apparatus there is another advantage in particular derived from this mode of dressing it when the fractured end from an angle anteriorly which by this manner of dressing can be completely kept down by a compress. you will think perhaps than a bandage in the usual manner might do; but it will be found insufficient. The chief use of bandages near the thigh is to prevent the action of the muscles and may likewise give some lateral support.

Fracture of the Leg

There occur most frequently about the middle and sometime they are fractured transversally accompanied with little or no displacement of the fragments, but if the bones been broken obliquely the lower fragments pass behind the upper forming an angle anteriorly. The upper end of the lower fragment being drawn back by the contraction of the muscles. The tibia is more commonly broken than the fibula. They occur sometimes at the upper end and near the head, sometimes in the middle and sometimes just above the ankle. if one bone only be broken the other keeps it in its proper place. if it be the tibia by grasping the limb above and below and trying to bend the leg the fracture

fracture may be ascertained. if it be transverse no displacement will take place.

I had once a case of this kind when the patient after having his limb dressed and being in bed three days felt so easy as to suppose I had been mistaken and that the limb had not been broken: the bandages was therefore taken off and the patient begin to walk about the room, the family although thought I had been mistaken. being confident of the existence of the fracture I requested him to let me see him walk, he did so but the bone presently bent under him he he fell to the floor and had nearly converted it into a com=pound fracture. in all cases by grasping the limb above and below the fracture the crepitus may be felt by moving the foot

Treatment

The leg is laid on a pillow after the extension and counter extension are made and the fractured epiphy=sis are brought into contact a roller may be applied from the ankle to the knee but as this cannot be easily opened to examine the fracture I prefer the strips during the application of the bandage extension & counter extension should be kept up by assistants two splints are then to be applied one on the inside and one

on the outside of the leg and secured by pieces of tape the splints should be of pasteboard to support the leg and keep it firm. two narrow boards are to be placed one on the inside and one on the outside of the pillow on which the leg rest and to be secured by tapes. if it be left in this manner the foot will fall outward and downward a bandage pinned to one side and passed round the foot and secured to the other side will prevent this. a cradle on in want of this a couple of hoops of a flour cask with about one third cut out of each hoop and crossed in the middle at right angle, are to be placed over the limb to support the bed clothes, &c

When the tibia & fibula are fractured transversely this method answers very well but when obliquely an angle is formed anteriorly and the leg will be shorter on account of the contraction of the muscles in these cases the extension and counter extension invented by Desault has been generally improved by Doctor Hutchison; whose method I shall now shew you. the counter extension is made by three pieces of tapes placed one in the inside and two on the outside of the leg. then a roller passed round them below the knee to secure them in than situation this should not be drawn tight or else the limb will

be apt to swell in consequence of the superficial veins being pressed, a silk Handkerchief which is the best should be passed round the heel, brought on the top of the foot decussated and brought below and tied to make the extension. Strip bandage are to be placed under the limb enough to reach from the ancle to the knee. The extension are now to be made by assistants while the Surgeon wraps the bandage. Two splints with holes in this manner are next to be placed one at each side of the leg. These must be long enough to reach from above the knee to below the foot. The tape on each side of the leg is to be passed through the two smaller holes at the upper end of the splint and tied when a bar is passed through a large one beneath and fastened with wooden pieces. The extending Handkerchief is tied to the bar by which means the extension is completly keep up. Two bags of Chaff are to be placed between the leg and the splints one on each side and the leg supported by a pillow.

The greatest inconvenience arising from this mode of treatment is the swelling of the leg occasioned by the bandage around the knee. The foot too often swell in consequence of the lymphatics being pressed as well as the veins. this mode of treatment will now do when

any considerable inflammation exist as it will tend to increase it. this is a good methode for compound fractures as it can easily opened to examine the limb and to apply dressing to the wound and the extension and counter extension can be preserved when the fracture is oblique. in one instance the limb swelled so much that I was obliged to take off and use Desault apparatus.

Sometimes the tibia is fractured near the knee joint in fractures happening at this place seldom any displacement occurs, but the joint is very apt to swell and be very much enlarged and is often difficult to cure. I have seen a case of this thing where all the antiphlogistic remedies had been tried as bleeding cupping purging and application of Leeches &c but without benefit. which was cured by extension and counter-extension and the antiphlogistic regimen. the Patient should be kept in the bed a long time as union does not take place soon. when the happen at the knee the limb should not be moved for four weeks and the dressings should be continued for six weeks and then moved by little and very carefully. &c

When it is fractured at the ankle the same treatment is necessary, the fibula is mostly fractured at the lower part near the ankle, but if broken by a blow.

it may be fractured where the violence is applied, but the fibula is sometimes fractured by an abduction of the foot and the foot likewise luxated. the reduction of it may be easily accomplished by grasping the foot and making extension. for fractures of the fibula the bandages should not be light for the same reason as the forearm. two splints are to be applied on the side of the leg to steady the foot as the cure cannot be accomplished if the foot is allowed to move. because the lower fragment will follow the motion of the foot. in twenty five days union will be effected.

of the Patella

fractures of the Patella are commonly transverse, sometimes they are oblique and I once saw one longitudinal. the transverse one are generally caused by a violent contraction of the muscles of the leg, and the oblique by violent external force as falling on the Knee Pe. when a fracture of the patella takes place the Knee become tumefied, and the upper fragment is drawn upward by the contraction of the muscle the lower fragment being fixed cannot move. the Patient cannot walk forward because he cannot extend his leg. but can

can go backward drawing his leg after him. When the leg is extended on the thigh the upper fragment will sometimes come in contact with the lower one and the crepitus may be felt.

In Longitudinal fractures the vacancy can easily be felt, the ligaments are so thin, the crepitus may be perceived on rubbing the parts against each other.

Treatment

In transverse fractures bring the upper fragment down as near as you can to the lower one. The patient is to be laid on a bed and the trunk raised by means of pillows to relax the extensor muscles of the leg. it is better to bend the leg upon the body. the leg too is to be elevated in the same way and the fragments are to be brought close. apply a bandage from the foot to the knee, and assistant then hold the upper fragment down while the Surgeon pass another bandage from the hips to the knee. The fragments being then brought together a compress is to be applied just above the upper fragment and a similar one below the lower. these compress are to be secured by a roller passed over the knee nearly in form of a 8 as follows, beginning

above the patella pass under the popliteo over the tibia just below the patella under the popliteo and so on ~~pursuing the same course~~ then over the thigh just above the patella and so on pursuing the same course again. this the best mode of dressing. the compress being secured pass the bandage over the patella so as to cover it to prevent the soft parts from swelling. in this manner the fractured surfaces of the bone can be kept in contact the bandages being wrapped from the foot keep the foot from swelling, while those from the thigh not only prevent the swelling but counteract the disposition of the muscles to contract. to prevent flexion of the leg a splint reaching from the Ischium nearly to the middle is to be applied nearly on the posterior part of the leg, it should be covered with flannel and secured by a roller. if the splint reach below the foot the pressure occasioned on the heel may cause ulceration. the leg is to be kept elevated for some time some Surgeon have been afraid to bring the edges of the patella in contact fearing the bony matter would be effused in the cavity of the joint an occasion anchylosis. if the bandages on the lower fragment be too tight anchylosis will sometimes take place

pressure causes an absorbtion of the cartilage and union take place between the bones rendering the joint stiff. the bandages should never be applied tight if much inflammation exist union will be a good taking place about eighth weeks when the dressing become loose they are to be removed by the Surgeon.

In longitudinales fractures a compress is to be applied on both sides and the flexion secured. sometimes the upper fragment when no attention is paid is drawn up three or four inches and a ligament is formed uniting the ends of the bones to assist in the motion of the leg. indeed we can seldom bring the fractured ends of the bones so close together as to form a bony union. this ligamentous union although it has been supposed an imperfection in the animal oconomy is a surprising proof of the perfection thereof, for if a bony substance had been thrown out and completly ossified the knee will have been entirely stiff. whereas by this ligament being formed the patient may come to have the perfect use of his limb by exercising it daily. The Patient should sit upon a table and swing his leg as much as possible although he will acquire strength but slowly, yet by perseverance the muscles will accom

= modate themselves to the extra lenght of the tendons &
the patient will be able to walk as well as ever.

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of Dislocation

When any bone forming a joint is forced from its natural situation, it is said to be luxated. it occasion the patient a good deal of pains and cause a considerable alteration in the shape of the limb. in general if the surgeon is called in soon after the accident it is easily reduced, the greatest difficulty we have to contend with is the contraction of the muscles. the ruptured capsular ligament does not make much resistance except in certain instances. the patient should be restricted to low diet, warm baths and mechanical force, and when there is a difficulty of reduction the patient should be bled to weaken the contraction of the muscles whereby we will be enabled to overcome them the more easily. in difficult cases I have found when the usual methods fail, than it is best to bleed ad deliquium animi. this completly destroys all muscular forces and experience has proved it to be the best method.

this mode of treatment was first practised in this country by myself when the patient before I have tried the nauseating effects of emetics just before vomiting, an injection of tobacco smoke has proved useful when other things have failed. Boyer said that intoxication

produce the same effect; and I suppose that it might answer the purpose very well. The muscular contraction continues to resist the reduction for about three weeks after which the muscles becomes accomodated to their situation, the bones begin to form adhesion, which with the contraction of the capsule of the joint, raises the difficulty of replacement: so that it most necessary to bleed ad deliquium animi, in cases where luxation has existed for more than a month.

When we apply force to the reduction of luxation we should be carefull only to apply to the dislocated joint. the limb should be placed in a relaxed state. I shall now speak of particular luxations and first of

Luxations of the Lower Jaw

When these Luxations occur they take place upwards and forwards so that the Condyle rest on the tubercule of the temporal bones, sometimes both Condyles are brought forward and sometimes only one. When one only displaced the Jaw is turned only to one side, when both are luxated the mouth stand wide open, in spite of the efforts of the patient to the contrary, the patient cannot swallows

the same effect takes place when only one condyle is displaced. if you apply your finger at the place of the articulation the cavity may be felt.

Luxations of the lower Jaw occur from yawning or opening the mouth too wide, sometimes causing a good deal of pains. some years since a woman in the market falling into a great passion and opening her mouth pretty wide the better to vociferate, luxated both condyle and to her great mortification could not close her mouth again and was brought two or three squaws in this predicament to me to have them replaced. they were easily reduced

Treatment

In proceeding to reduce the lower Jaw we must take the precaution to wrap up our thumb pretty well to prevent their being injured between the teeth, by the convulsive action of the Muscles the moment the reduction takes place, they must be placed as far on the molar teeth as possible the fingers are to be placed under the chin then push the Jaw downward and backwards at the same time squeezing the fingers upwards. if the fingers do not press the Jaw upwards the reduction will not be so easily if at

all accomplished. I have seen great force applied directly backwards without any effect., some have advised to give a Knock under the Chin, this may sometimes succeed, but is apt to break off the Neck of the Condyle.

no bandages are necessary after the reduction

This may take place either at the Sternum or at the acromium process, I have never seen it occurs at the Sternum, though I have no doubt but thow it may occur there an account of the superficial articulation if a considerable force be applied so as to push the shoulder forward and inward when it happens the patient is unable to raise his arm. Luxation at the Scapular end I have seen. they may be occasioned by the Patients being thrown on his shoulder from a horse or other way, so as to press it downward, in both case the

Treatment

is the same as for fractured Clavicle. when the Scapular end is dislocated we must continue the bandages for a considerable times or also the shoulder will sink down lower than natural and form a tumor on the top of the shoulder.

Luxation of the Clavicle

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Treatment

is the same as for fractured Clavicle. when the Scapular end is dislocated we must continue the banda=ges for a considerable times or also the Shoulder will sink down lower than natural and form a tumor on the top of the Shoulder.

Luxation of the Os Humeri

This takes place at the shoulder joint and occurs oftener as than any other bones: owing to its great latitude of motion in all directions by its glenoid cavities, it is mostly luxated downward towards the axilla and it is mostly occasioned by a fall on the shoulder, though I have seen it luxated forward and inwards between the Pectoral muscles and Clavicle, but mostly inside of the coracoide process. it is said to have been luxated backward, but that I have never seen.

When it is luxated inwards and downwards a depression can be felt above the humerus, between it and the Acromion process, if you put your finger in the axilla the round head of the humerus may be felt the Patient cannot put his elbow to his side, he cannot rotate his arm, nor put his fore arm to his head which is mostly somewhat flexed, he commonly has an inclination to rest his arm on something to support it. I have already shewn how to discriminate between luxations and fractures which you will do well to remember

Luxation of the Os Humeri

The lateral plane of the shoulder joint can be
=ven only when any of the bones, owing to the great
laxitude of matters in all directions by the glenoid cavi
=ty, is nearly horizontal. Consequently the cavities
and is usually occasioned by a fall on the shoulder
though I have seen it produced by muscle and tendons
between the external muscles and flexed, but usually
inside of the corresponding bones. It is said to have been
imposed backward but they I have never seen.
When the dislocated humerus and surrounds a plane
=ture can be felt above the humerus, between it and
the coracoid process of scapula but cannot reach in the
cavity. The round place for the humerus may be felt
the external rotators put the elbow to the side, the
cannot separate the arm, nor put the hand behind the
head. It is usually some trifle, especially the commonly
has an inclination to put his arm on a formal thing
to support it. I have already shewn how to
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ever still be well to remember

Treatment

If the Surgeon is called soon there is but little difficulty in replacing the bone, because the muscles do not begin to exert themselves immediately. I have accomplished it by placing one hand on the Acromion process to make the counter extention and pulling the arm to make the extention. to apply greater force it has been advised to apply a couple of towels in the arm just above the elbow by means of a roller then than the upper end of them down. but Mr Hays method I think preferable, when the arm is drawn out by an assistant and contra-tension made by another: place your hand in the Apilla and push upwards at the same time suddenly push the elbow inwards the side after you have tried this method it will have effect bleed ad deliquium animi. if the patient be strong this cannot do any hurt and if weak there will be no necessity for it. this completely removes muscular action and the limb can be reduced with ease. about two years since a man was admitted into the Pennsylvania hospital with a dislocated Humerus, the accident had happened three or four weeks previous and the pars were so much swelled

than he had to remains about ten days before we could tell wheter is was luxated or non; after trying all the usual methods to no effect I bled him till he fell on the floor in a fainty fitt, when the bone was reduced with the great=est ease. I have since repeated it with the same good succes after a limb has been luxated for more than three or four weeks the muscles became accommodated to the situation and begin to form adherence. the best way to accomplish reduc=tion after adherion has taken place is by a compound tackle take two rounds towels and secure them at the middle just above the elbows by means of a roller turn the upper halves of them down to the lower and through the ends of them pass the rope of the tackle to make the extension, the other rope to secure the tackle is to be fastened to a firm place to make the counter-extension a long trap about an inche wide, stuffed with horse hair or cotton must be applied again the acromion process and made fast to some fixed place. To prevent the strap slipping off and excoriating the shoulder a strip of a roller may be passed round it by which means it may be kept in its place. to secure the strap pass a wide strap or belt round the body securing it with a buckle or otherwise to have a rope which may be held by an assistant, to keep the body in its place as the

patient is apt to get out of it, Thus fixed draw the rope to make the extension and have a care than the counter extension be made again the Acromion process, else the arm may be tore from the Chest. it is therefore a great Service to make the counter extension again the acromion process. in making the extension the arm should be rotated to separate the adhesion which has been formed, the Surgeon may have a towel under his arm and over his shoulder to pull his arm up, or he may put his arm in the Axilla and push the patient elbow down with the other Hand, using the Humerus as a lever. the bone has been lodged in the Axilla for six and for 9 Months and been replaced and indeed for a much longer time for it is possible to displace a bone surrounded by a firm capsular ligament from a natural to an unnatural situation and it is possible to bring it from an unnatural to a natural one. but when the bones cannot be reduced we are not to dispose allogether as a great many useful motions may be performed. I know a Cabinet Maker whose Humerus was dislocated and yet was able to follow his trade; and the motion he could not perform was drawing his arm directly upwards. I shall not pretend to describe all the machines than have been invented for reducing luxations but only a few of them it has been supposed than a staple fixed in the floor

over head and the patient suspended from it by his arm would be productive of good effect, but it would endanger, tearing the arm from the chest. as no counter extension can be made against the scapula or acro=mion. another method is by grasping the arm for the purpose of making extension (the Patient lying down) the place the foot in the axilla for the purpo=se of making the counter-extension and when you make the extension pass the arm towards the side and your foot will thrust the bone in its place

I saw Mr Hunter do this very successfully, some advise having the arm over a ladder, but none of these methods are very good.

Luxation of the fore Arm

The fore arm is luxated upwards & backwards, form=ing a protuberance behind the arm, & the arm is kept flexed; though sometimes the arm is luxated laterally. the covering of the part is so thin, that the Surgeon can readily ascertain the nature of the case, the Patient can=not flex or extend the arm, the Coronoid process of the Ulna occupies the cavity naturally filled by the Ole=cranon and it is that prevent the reduction.

Treatment

In order to reduce it an assistant should take hold just above the Elbow and another below at the wrist to make the necessary extention, the Surgeon is to take hold just below the elbow and pull at the same time directly backward to draw the Coro=noid process of the Humerus. when the arm is forcibly extended by the assistant bent it towards the body, which will in most instances be sufficient to compleat the reduction. a bandage may be placed round it to secure it.

Luxation of the Wrist

this takes place forwards and backwards, it can be readily reduced by making the proper extension and pressing the bones at the same times into their place

Luxation of the fingers

these also occurs backwards and forwards, extension and bending will commonly reduce them.

Luxation of the Thumb

When the thumb is luxated at the second phalanx it is the most difficult to reduce of any bone in the body, extension has been applied so as to tear of the first phalanx and yet the bone not reduced

Luxation of the Os Femoris

This formerly was thought by some not to occur on accounts of the amazing strenght of the capsular ligament which was computed to weight at the wright of 1000 pounds and from this concluded than luxation would not often happen. I have however seen more luxa=tions of the thigh at the hip than ever I saw fractures of the neck of this bone. I believe about nine luxations and not more than three fractures. it is generally luxated so that the head of the bone passes backwards, lodging in the dorsum illium and nept to this downward, and forward into the foramen ovali and may be reduced immedially. when the luxation is backwards and up=ward, the limb is commonly an inch and a half shorter than usual. If a bruise has taken place about the Pelvis it may influence the lenght of the limb by cau=sing the Pelvis to be drawn to one side. in order to ascertain if the Pelvis be strait place a string or strip from one superior anterior spinous Process of the Illium to the other. if it cut the body at right angle the pelvis is straight, then measure from the ante=rior process to the knee to ascertain the lenght

of the limb it is necessary to know if the Femur be straight before we can ascertain the existence of the luxation. if the Joint, be bruised, the injured limb will be the longest, when the luxation is upwards and backwards the toes will be turned inwards and turning them outwards causes great pains. the patient can not move the limb, this when all other symptoms are wanting is enough to ascertain of a luxation upwards & backwards. it is by no means difficult in ordinary cases to distinguish between luxation and fracture of the head of the thigh bone: of this I spoke when treating of fractures. when the bones is luxated no crepitus is felt and when the neck of the bone is fractured the foot always turn to the out side and is easily turned inwards. but if it be luxated upwards and backwards the foot cannot be turned outwards at all or without causing great pains. when it luxated downwards and forwards it is lengthened mostly about an inch and the foot is turned outwards and turning it inwards causes great pains. the distance between the trochanter major and the superior anterior spinous process is greater. when the head of the bone is luxated forwards and upwards on the os pubis it is a little shorter, this is a very rare occurence only one case of it, is mentioned by Desault. in which case the foot turned outward. the same kind of treatment is

required nearly in all cases than it is, extension and counter extension ~~in a right line~~ as the brim of the Acetabulum is large, an apparatus to dislodge the head of the bone and pull it straight from the body making the extension and counter extension in a right line with the body is required. This is the general principle on which luxations of the thigh are to be treated. The luxation of the head of the thigh bone. it is necessary to use considerable degree of force for its reduction and the best method is compound pullies where they are to be had; but it can be readily effected by the assistance of men, and one advantage is, they can desist instantly if required. but in obstinate cases where more force is necessary the pullies are generally used

Treatment

is the next in course. when the luxation is upwards and backward the patient is to be laid on his sound side and the thigh bent at the thigh and knee to relax the muscles, a strap for the purpose of making counter extension is to be fixed under the perineum, between the scrotum and the injured thigh (having soft substances between it and the peritoneum)

and fastened to a fixed point. next two strong round towels can make the extension with great force on each side just above the knee are to be secured by a roller to make the extension and when that cannot be fixed above in fat persons it may be put just below the knee but it is best to secure the extending power of the luxated part. a pully fixed to the towels can make the extension with great force. during the extension the surgeon must rotate the bone to dislodge its head; if this is found to be insufficient bleed ad deliquium animi. when the head is luxated into the foramen ovale or forward on the os pubis, make the actual extension and counter extension in a line with the limb and the same line make extension and counter extension at rights angle with the thigh outward, which is absolutely necessary to effect this the patient lying on his back on a table, pass a strong towel round between the thighs close to the peritoneum; an assistant is then to get on the table and take the towel on his shoulders and pull upwards to make the extension when the knee is placed on the crista of the illium to make the counter extension mean while the surgeon rotate the limb, if this is found insufficient to draw the head of the bone out of its situation fix a pully to the towel, and pass

a strong bandage round the christa and fasten it to a staple, for making the counter extension. this method succeeded last winter, when the head of the bone is on the pubis, the Surgeon should bend the leg at the knee and rotate it by placing one hand on the knee and grasping with the other below it when the extension is making. Desault thought the capsular ligament prevented reduction but I believe than almost the only cause of ~~reduction~~ resistance in reducing luxations is the contraction of the muscles, for the same orifice in the capsular ligament which suffered the head of the bone to escape out of it would also be large enough for it to return. if the bone is not reduced it will form a new socket for itself. a proof than the head of the femur will form a socket out of the acetabulum is instanced by a girl who fell and hurt her hips very much so than she kept her bed for several weeks when the swelling than had supervened had subsided her thigh was found to be luxated. sometimes after she begin to go about again, she fell it hurt the other hip. when she got over this fall, she found than her legs where contrary to when they had been nearly of a length, and after she had acquired more strength in her hips every day, she was shortly after taken sick and died.

the hips were dissected and found both luxated, new acetabulum were formed on both sides which no doubt would have done very well had the lived. I shall next speak of ~~the thigh~~ the thigh bone luxated directly backward and lodged just behind the acetabulum. a case of this kind come under the care of Drs Physick & Wistar at the Pennsylv Hospital in the winter of 1811. which after several attempt to reduce it by extension and counter extension which was made with great force to no effect was reduced in the following manner. by laying the patient on his back Dr Physick brought the thigh up to a little more than a right angle with the body, then placing the palm of one hand upon the Trochanter major, with which he pushed the bone towards the acetabulum, when at the same time he made a forcible adduction of the bone with the other by which means he succeeded in the reduction.

Luxation of the Knee Joints

these occur but very rarely I have never saw but two cases. and in both the tibia was received on the external condyle. this is readily reduced but not easy keep in its place when done. the leg is much distorted Desault long splint answers very well for keeping the bone in its right place. after they are reduced the patient should keep his limb in a state of perfect quietude for 8 or 10 weeks until the ruptured ligaments are perfectly healed. the patient must be kept in bed I saw a luxation of the ankle though they rarely occur in a lady with high heel shoes on was coming down stairs and stepped too far so that the heel of her shoe only rested on the step the weight of her body bend=ing the heel back pressed the tibia forward of the astragalus on the instep in consequence of ill shoes which the toes were kept extended the malleolus was likewise broken, I was not called till swelling had subsided, I was then able to ascertain the nature of the injury it was reduced by an assistant holding down the tibia when I caught hold of the heel and toes and pushed the foot forward. a splint was

Luxation of the Knee Joints

Those persons who have never lost their
power over the tibia that secured on the external
condyle, that is usually reduced but retains itself on the
inner side of the knee. The leg is turned in toward
the opposite knee. The patient complains of pain
on slight flexion. Gentle pressure on the knee in
the popliteal space, the patient will be found to have
lost the limb in a state of perfect quietude for
some to weeks until the ligaments are perfectly
healed. The patient must be kept in bed. I have a
specimen of the cadaveric condyle that lately occurred in a
lady with high heel shoes on her coming down stairs
one different for years. In these the heel of the shoe
only rested on the step. The weight of her body dis-
=placing the heel back, pressed the tibia forward of
the articular surface of the femur. In cases of this kind
the tibia has been displaced the malleolus has
slipped behind, I have not called it malleolus has
dislocated, I have been able to accounts the causes
of the injury. It has occurred by an external twisting
down the tibia when I thought held of the heel
and has been pulled the foot forward. A patient has

applied for the fractured malleolus. by these means I succeed in a cure

Sprains

For the treatment of these I refer you to Dr Boyer the Joint should be immersed in cold water for sometimes or water poured over it. after which cloths wet with vinegar should be applied and continued for some times and some days and keep at perfect rest the whole time. for if the patient walk he is sure to bring on inflam=mation, which upon resting will subside and return again upon motion if used to soon and if the patient continue to use it, suppuration and hetic fever may be the consequence. this in a case of a lady actually occurred caries on the end of the bones take place and amputa=tion is necessary for the recovery of the patient.

Sprains

When the ligament of the ankle joint to strained the ankle should be immersed in cold water for 48 hours or water heated over it. After a flannel cloth first with vinegar should be applied and continued for some hours and some days and keep at perfect rest the whole time. For if the patient walk in a hurry to bring on inflammation, which is more painful and disabling and return upon another if used to move and if the patient continue to use the joint weakness and pain may be the consequences. But in a case of a lady actually strained rather on the outside of the knee joint the pain and swelling then it necessary for the recovery of the patient.

Injuries of the Head

Injuries may be divided into external as they effect the scalp and teguments and internal when they effect the brain and its membranes. they are of several kinds

1° Contusions
2 Punctures
3 Inflammations of the brain and its membranes
4 Concussions

I shall begin with the scalp. the injuries of the scalp are several and first

Contusion

When contusion of the scalp occurs in which there is a rupture of the vessels they pour out their fluids causing a tumour and swelling which has a pappy feel around the tumour, there are hard edges which impart to the finger a sensation of broken bone, often misleading the inexperienced who are not aware of it. and induce them to make incisions through the scalp when to their surprise they find the bone sound and thus produce a suppuration, and perhaps exfoliation of the bone

Treatment

The best is the application of vinegar in compresses to the injured parts, in a few days the effused blood will be absorbed.

The scalp is sometimes lacerated and torn, loose from the bone for some extent and under such circumstances it has been advised to cut off the loose portion but this should never be done, the parts should be well cleaned from dirt &c and the flap placed in its natural situation and kept so by adhesive plaster or stitches. it has been objected to this than abcess will form underneath the loose parts and have to be removed at last. if abcess do form they must be opened as in another part and it is better to run the risque of a few abcesses, than to produce so great deformity and perhaps cause an exfoliation of the bone

Puncture

in a punctured wound of the scalp the patient is often affected with great pains, especially if the aponeurosis be wounded if the inflammation extend to the pericranium it becomes necessary to dilate the wound, the patient becomes feverish. I have

known it occurs in every kind of wounds except incised wounds. it has been supposed than it occasioned inflammation of the brain and therefore trepaning has been advised. but I believe it does not occur when the injury is out side. for it is hardly probable than two sides of a cavity will become so violently inflammed at the same time. for instance in violent inflammation of the villous coat of the stomach the peritineal coat is hardly inflammed. and vice versa. in peritineal inflammation the internal parts are seldome effected & besides these affections there is another effect of injuries to the scalp. which is severe fixed pain in the part stricken. it takes place from the time of the accident. I have seen contusion of the scalp which occasion a great pain in the part and continue for a long time. the first case that I ever saw was a lady who had received an injury on the scalp on the parietal bone from a falling of a cask which give her great pain. the inflammation subsided in a few days but the pain continued. they had used cracuans without any benefit. upon first examining the case I though the bone was fractured, but upon further examination it was found to be only bruised & proposed an incision which was made through the scalp, the pain immediately ceased and never after returned. another instance was a young man who received an injury on the scalp upon the parie = tal bone on one side, and at the same time received

a blow on the other, great pain followed it which till increased and by the second day the pain was become so great, that his friends had to hold his head to prevent the ordinary sound of the house made by walking a cross the floor exciting convulsions. evacuating remedies were used but without effect. an incision was made through the scalp in the contused wound by which he was much relieved but the pain returned in half an hour on the other side. the bruise on the other side was laid open in the same way and the pain cured and never returned again. some cases of this kind have resisted every treatment and subsided only by retiring in the country and remaining there for some time

Inflamation of the brain & its Menbranes

When injuries of the head occasion compression of the Brain, coma, sickness of the stomach involontary discharges of the urine, and faces are the symptoms which mostly take place. the causes which produce these effects are of two kinds.

1 Indentations of the ~~Brain~~ skull

2 ~~the principal~~ effusion of Blood or other fluids collected inside of the Cranium between the membranes of the Scull, or in the substance of the brain itself, or

in the ventricles and this may happen without a fracture of the Cranium or with it fractures of the Cranium occur sometimes without these symptoms even when the bones is indented

an instance of this was in a fractured forehead so that the little finger might lie in the indentation and yet no symptoms of the injury of the brain existed, but in all the cases of this kind that I have seen the injury was received just above the frontal sinuses - when no symptoms of compressed brain occur the scalp should not be divided. but when symptoms of compression do occur make an incision through the scalp so that you can examine the bone. if the incision be not sufficient for the purpose relieve the compression with the trephine. it has been customary to separate a portion of the scalp. I myself cut off about one fourth of it, but this is allways cruel. since it is no use. a simple incision or a cervicle one is sufficient to examine the state of the bone if a fracture is found to exist it is necessary to make a perforation through the bone to relieve the sanguinous in compression of the brain arising from effusion from the vessels, the symptoms of compression do not always occur immediately, because the effusion does not allways accumulate so soon enough to produce it immediately. I was once called to assist a boy who has received a blow on the forehead by a stone thrown across the street, the bone

was fractured and a little depressed the pains was not so great at first but than he went home & give a history of the accident, but before I arrived he was attacked and fell from his chair supposed to be dead. his pulse fell and his extremities were cold, the operation of trepanning was performed and blood flowed from beneath the Scull which had occasioned the compression and he was immediately relieved. the

The next injury I shall mention are such as produce inflammation of the brain and its membranes, the inflammation does not arise on for some time after the accident

The Patient cannot sleep has constant wachfulness pulse hard and tense, the face becomes turged and flushed and sens of lightness as if a chord was tied round the Brain a suffusion of the Eyes. delirium nausea vomiting &c if these symptoms continue for some days without any abatement or rather increase instead of diminish and they are occasioned by contusions of the scalp a free incision should be made down to the bone to examine the state of the parts if the inflammation within the Scull has proceeded on to the suppuration of the pericranium will be found separated spontaneously from the Scull and discharge commonly a thin ichorous matter, the bone will have an unhealthy appearance generally of a whitish milky colour but sometimes a purple tinge under such circumstances

the trepline should be immediately applied. Inflammation of the Brain may occur from simple contusion of the scalp or from compression of the brain from contusion of the scull apply bread & milk poultice, and if any abscess form underneath heat it as any other place in all cases low diet should be strictly adhered to, to prevent inflammation of the Brain or of any of its membranes, Purging should be urged and copious V.S. Blisters should be applied all over the head and keep running. in inflammation of the dura matter where we have reason to believe there is a formation of matter on its surface, between it and the scull an opening should be made through the bone for its discharge. Sometimes both the dura and pia matter are injured when it is the last perforation is of no use as the matter collected below the dura matter cannot be evacuated, when there is reason to suppose that inflammation of the dura & Pia mater has taken place from contused wounds the Patient should be tre=panned at the place of injury which by removing the tension of the inflammed membrane, may prevent suppuration and a train of disagreable symptoms. when the degree of violence has been sufficient to fracture the scull, we sometimes find the edges of the fracture are close, a ques=tion has since arisen whether the Patient should be immediately trepanned or not. Mr Bell who took

great pains to inform himself of the nature of injuries of the head is of opinion that it had better to be done immediately, and it is certainly safest because there is a great risk of inflamation and suppuration taking place. He has altered his opinion as he now said that it is not best to apply the trephine until symptoms of compression has actually taken place. the reason why it should be done is than the fracture is compound, or else it would not be ascertained than the edges of the fracture are in contact, this make it necessary, but I have seen when the inflamation was not great suppuration of the Dura mater was avoided by the antiphlogistics regimen. in simple fractures of the cranium when the brain is not compressed the trephine should not be used immediately.

Concussions

this sometimes produce symptoms of compression and sometimes not, it may occur from jumping from a height on a hard floor, from falls or violence done to the head in wounds of the scalp when the patient becomes immediately senseless or delirious beginning a sentence or breaking it off in the middle suddenly; it is supposed than the brain has been shaken. I doubt I however whether some of the vessels in the inside of the cranium are not ruptured upon some occasions I have on examination when the brain

bras supposed to have been concussed found the vessels ruptured and in another not so in these cases no benefit is derived from bleeding. general remedies should be used, the antiphlogistic plan; stimulating remedies should be avoided V.S low diet Blistery - and if they fail mercury sufficient to excite salivation. as a general remedy. I believe it would be right in contusions of the head in every instance to pour cold water over the head for sometimes by which means the effusion from the vessels of the head will in a general measure be prevented. I would recommend for your perusal Potton the injuries of the Head

I have now to show you the method of operation with the trepine, in the first place remove the hair by which we will be able to examine the injury of the Scalp, next make an incision through the scalp for which purpose a scapel the hand capped with Iron in order to clear the bone will be found fitted.

in laying bare the scull take notice whether it be fractured or whether a groove made by some of the vessels do not appear; if it be the latter the edges will be smothe if the will be sharp the bone be depressed it must be elevated - to do this it is necessary to remove a portion of the sound part too, the centre part of the trepine should be placed in a sound part, or else it will tear

to depress it more. While the preparations is making great care should be taken to move the center pin till as you perforate deeper, so that it does not perforate the dura matter. it is likewise to be observed while operating over the lateral sinuses. When you suppose you are nearly through the bone the hole should be well cleaned out to examine if in any place it is nearly through: for this purpose a common tooth pick answer very well; you may likewise have recourse to your Elevator, (this should be often towards the last.) and by that you can raise the inclosed piece. if you find it nearly through on one side bend your instrument on the other. it is advisable to force the piece out with the Elevator before it is quite cut through as there will then be less danger of injuring the dura matter; and any specula of remaining bones may be broken off with the Elevator a saw. of a shape appropriated for that purpose may be used after the trephine where long depression of bone require it because to use the trephine adjoining would remove too much of the sound part of the bone. When symptoms of extravasation within the Cranium occur from external injury to the head, a perforation should be made to let out the effusion through the Scull. When blood is collected between the Dura mater and the Scull a hole may be made in this manner to let it

it out. Sometimes this effusion is but small at other times it is of great extent. to than the Dura matter lying close to the perforation prevent its escape., a spatula introduced between the dura matter and scull will suffer the blood to flow out. sometimes an effusion is collected between the dura matter and the Brain; and instead of a flat surface a convex one is presented. sometimes rising up so as to fill the opening of the bone, but no motion of the brain will be perceived., these are not symptoms of extravasation between the lobes of the Brain for if this was the case if effusion has taken place between the lobes of the Brain, the motion of the brain could be perceived. I have never seen the dura mater punctured in any case in which the patient got well, therefore when it can be avoided, it should not be done. I have cured an effusion in the brain by prescribing the antiphlogistic regimen and bleeding as often four or five times in the day for four or five days.. which I believe would not have happened had the Dura matter been punctured. there arise a fungous portion from the wound and suppuration take place at its root and the patient dies.

After the operation of trepaning has gone through bring the edges of the scalp in contact and then apply a

simple poultice of bread and milk which is the most easy application. lint is not a good dressing nor should any greasy dressing be applied as the would prevent the discharge from flowing out. The Poultice should be continued until the granulations appear and then dress with simple Cerate. The Operation of the Trepine in this case only relieve the compression of the Brain. this done we must guard again inflammation by bleeding, cathartics and low diet & the anti phlogistic plan should be persevered in when any symp=toms of coma continue and in compression of the bone the edges of the divided Scalp (where the brain is completly relieved by elevation) may be drawn together to unite by the first intention as it would take as much longer time to heal if it be poulticed and suffered to Sup=purate & granulate.

Disease of the Eye

first of these inflammation. this may take place in the Eye lids either in the whole or in a part in the tunica conjunctiva or in the globe of the Eye either in the anterior or posterior chambers. Inflammation of the Eye lids sometimes cause an extravasation of Serum into the cellular texture, swelling the part very much so that the patient cannot open his Eyes. the Skin become of a Scarlet colour this frequently come on in the night, the Patient supposing it arise from the bite of an insect. it is however not easy to ascertain what is the cause, unless when it arises from mechanical violence.

Treatment

In general if there be much inflammation V.S should be used which with the exhibition of a Mercurial purge and a low diet will mostly answer the purpose if this is not sufficient the application of Camphor or Brandy may be tried. the best way of applying these remedies is to dip rags into them, taking them out and applying them over the Eyes. the discharg of fluids in most cases of inflammation of the Eye lids is but.

small. Sometimes the edges of the Eye lids become excoriated and discharge a viscid purulent matter agglutinating the Eyelids so that the patient has to wash them in the morning before he can get them open. The general opinion is that it is owing to an ulceration of the mouth of the ducts of the Glandula Meboni I however believe it owing to ulceration seated at the root of the hairs resembling in this respect Tinea capitis a proof of the correctness of this opinion is that the hairs have been Drawn out and the patient got well.

Treatment

a Solution of Sapis inferioris has been advised taking care to wash it off afterward so that none of it may get into the Eye. Spermaceti has been used with advantage. The most general remedy is Sacch. Saturn. or ungt Citrin. I have however found that the Bright. a price applied between the edges of the Eyelids is the best remedy, when this fails drawing out the hairs has been effectual. a Girl about ten years old was cured by this ointment in about two weeks, she has been affected with inflammation and ulceration of the Eye lids for nine years.

Disease of the Tunica conjunctiva

When this is inflammed it becomes red, owing to the increased action of the vessels which were before pellucid but now admit red blood. The Patient cannot bear the action of the light, the pain is of a burning kind: causing a sensation of exterior matter. in some instances the pains is not confined to the Eyes but effect the forehead. Sometimes the inflammation is in a purple or specks this may be situated in the tunica adnata or cornea the only difference in their effects is that the latter obstructs vision. Inflammation of the conjunctiva spread over the whole cornea, throwing out coagulating Lymph and if not soon cured leaves a film behind it obstructing the sight of the Patient, and the pimple just now mentioned if not cured leaves an opaque spot behind it. the inflammation of the cornea of the Eye cause an exhaustion of coagulating lymph, which occasion the disease called unguis. the injury done to the Eye which occasion inflamation are

1 Mechanical as sand getting into the Eye or wounds. &c

2 acrid substances applyed to the Eyes these often

occasion blindness, as Lime, Smoke acds. &c

3. too strong light.

4 too much exercise of the Eye in viewing small objects

5 Cold

6 Intoxication

7 Small pox, venereal diseases, &c

Inflammation often occurs without our being able to assign any cause for it. Inflammation of the Eye is some=times produced by the matter of gonorrhea being appli=ed to them. this is a rare occurence. but when it pro=ceeds from that cause it is mostly pretty bad.

Inflammation of the Globe of the Eye.

this may occur either before the christaline lens or in the posterior chamber behind the lens, it is attended with great sensibility, pain and fever. when it affect the anterior chamber there is not so much pain as when it occurs in the posterior chamber. the pain is occasion there is very great, the fever runs very high and generally if it be not removed the sight is lost. the first case I ever saw of this kind the Patient died

Treatment

First remove all mechanical violence, and avoid the remote cause. if it be produced by some extraneous matter getting into the Eye as a Speck of Sand lodged between the lid and globe of the Eye it must be wipped off. a probe with a soft piece of rag, wrapped round it and passed between the Eye lids will mostly discharge it. Should this not be successfull water should be injected into the Eye, if it still remains by inverting the lid, we are enabled to examine it and move away the sand. if the Sand stick in the cornea it will not be easy to see it, as the Eye will roll about incessantly and cannot be held still by the Fingers a Speculum or a handle of a paire of Scissors will enable us to hold the Eye still, so that we can examine it and move away the offending object with the point of a lancet. in Trichiasis inflammation of the Eye occurs, from the hairs of the lid growing inward, when this is the case pulling the hairs out will produce a cure, but there is another affection of the Eye lid, the tarsus itself is sometimes excoriated. it may be turned out and divided or a piece of the skin may be taken out taking care not to divide the conjunctiva and the divided edges brought into contact and kept so by an interrupted

natural we can generally cure inflammation which should be regulated by the violence of the fever the Degree of inflamation when the Patient has lost a quantity considerable of blood from the arm he can bear cupping and leaching, if the inflamation still continue, There is another mode which is very benificial (viz) the scarification of the adnata, the next remedy is purging. the antimonials are found very use=full. lastly applications to the Eyes. the mildest remedies should be tried first; of which perhaps is the pitch of Sas=safras is the best. Sometimes a bread and milk poultice answers very well but it is frequently found too heavy. Crumbs of bread put in a gaze bag and boiled and dipped in rose water, applied to the Eyes is found to be a very pleasant application. if this does not answer Lau=danum, or sacch: Saturn., without alb. combined in their usual proportions. but astringent should not be applied too soon. they do damage if used before the proper Evac=uations has been premised. in such cases I think two drac=hms of vinegar greatly improves the remedies, when the inflamation has gone on to suppuration and matter is collected under the cornea it should be immediately dis charged by an incision made in the same manner as for the Cataract instead of allowing it to open by the natural process of ulceration which would render the

the cornea opaque. When these remedies fail mercury used so as to produce ptyalism with vegetable diet always prove serviceable. two other circumstance are of the highest importance, 1st to confine=ing the patient to a dark room, 2d a diet perfectly vegetable a seaton in the neck may of service to the inflammation.

Unguis

this sometimes grow over the cornea so as to prevent the sight entirely. the only remedy is to dissect of the membrane which is easily done with scissors except that part which adheres to the cornea. which should be carefully dissected off with a scalpel. I have always mentioned that inflam=mation sometimes occasion opacity of the cornea which almost always remains. but which sometimes goes off voluntarily if left to itself mistaken notions have led the Physicians into a very erroneous practice. Molasses has been dropped into the Eye and finally powdered glass has been used with view to wear it off. but they always make it worse. if any part of the cornea remains transparent an operati=on may possibly restore vision again by making an artificial pupil.

I once saw a case where the patient had wash=ed his Eye with urine when labouring under a gonor=rhea, inflammation supervened and all the cornea

became opaque. The patient applied to me for relief and by his anxious request I consented to operate on his Eye. Though with little hopes I pushed the Knife through the cornea and cut of a piece of the Iris, the Eyes was then closed and the Patient put to bed, he can now see to read if the print be large.

I never saw such an operation before, when the Eyes are violently inflammed it is difficult to remove the inflammation.

I once had a case of violent inflammation of the Eyes the patient laboured under great pain in which V. S. low diet purging salivation &c had been used without succes. Tapping and Scarifications were like wise useless. It was cured by lar water alone wett-ing rags and laying over them.

Fistula Lachrimalis

It is impossible to cure this without a knowledge of the anatomy.. The tears secreted by the Lachrymals glands which are not used to lubricate the Eyes are taken up by the puncta lachrymalis and carried to the lachrimal sac from whence the tears are conveyed into the nose at the lower part just at the lower turbinated bone by means of the duct ad natum. These two Ducts which lead to the nose in common with other ducts are liable to Strictures when they are stopped by any means they became swelled betw=een the obstructions and the Eye tears in the Eyes & the sack is protuded. if you pres on the swelling the tears will regurgigate and if the pressure be increased the tears will be followed by a viscid matter resembling mucous which is probably secreted by the upper Surface of the sac. if the Eye lids stick together they must be washed and a piece of dressing placed between them

not unfrequently inflammation take place in the lachrimal sac, occasioned by the obstruction of tears or from the patient taking cold. The inflam=mation is generally attended with fever, V.S. and low diet are necessary for the cure, when the sac is disten=ded so as to burst in the Eye or open by ulceration it is

then called fistula lachrymalis. in fistula Lachrymalis occurring from strictures of the Lacrimal Duct, no incoveniences is experienced by the patient only those arising from the tumour which may easily removed by placing the finger on the internal Canthus of the Eye and pressing the sac, the tears will flow out down the cheek, an accumulation of tears in the Lachrimal sack occasion the inflammation to terminate in suppuration.

T

if the duct can be opened by a probe passed from the sack below the stricture so as to let tears flow into the nose it should be done. after the probe is withdrawn a piece of bougie long enough to reach from the outside of the Eye into the nose should be introduced and kept in to prevent the stricture from stopping the passage again. It

the bougie should be long enough to project out about half an inch which should be bent down over the cheek, when the duct cannot be opened we must make an opening through the os unguis into the nose for the discharge of the tears. it sometimes happens that the fractured edges of the bones which is made by perforating the os unguis throw out a bony matter and stop up the opening again. the swelling of the sack shew us where

to make the opening.

When we make an incision into the integuments to introduce the punch and the back of the knife should be upper most to prevent cutting the tendon orbicularis palpebrum; the incision being made a piece of horn is to be passed up to the nose to make the necessary resistance against the puncturing instrument which is a hollow punch invented by Mr Hunter. it is to be introduced into the sack until it comes in contact with the os Unguis. through which the opening is to be made. when the opening is made in this manner the use of a bougie is Necessary. it is sometimes attended with fungous and carich of the bone. the various portions of the bone should be extracted and the fungus treated as in any other part. bring the Edges of the wound together and secure them by adhesive Plaster. and the tears will close. through their new made channel without Difficulty.

X has been assisted by V. S, cupping purging Blisters leeches Electricity
Vc but found to be of no use. if it arises from mechanical vio
=lence it may be dispersed. indeed nature unassisted by art
poses the power of removing the opacity; of this I have known
several instances. I think it take place oftener when the capsule
of the lens is opaque and oftener in women than in men.

I have see the cases of two young women in whom the absorp
=tion occured. they could see by the aid of the convex lens, which
make me believe the lens was removed. I have seen another case
brought on by an unsuccessfull attempt to touch. a

as Medicines are unsuccessfull in the cure of this disease
it is an happy circumstance than it may be relieved by
Surgery.

Two operations has been proposed viz 1st couching, 2 Extracting
couching is performed with a needle, this is passed through the
Scleratica coat about one tenth of an inch from its Junction
with the cornea and passed in till it get to the centre
of the lens. it is then turned with its flat part against the lens
which is depressed below the vitrous humor; if it should rise the
operation should be repeated.

Extraction consist of making a semi section of the
cornea, through ~~with~~ which the lens is removed from the Eye
both operations have been performed; that of Couching is
the most ancient than of Extracting the best. if

On Catharact

By this it means an opacity of the Christalline lens or its capsule which prevents a transmission of light to the retina. it shews itself by the speck behind the pupil which is most commonly grey. it commences with dimness of vision compared by the patient to looking through gaze and sometimes before any opacity is discernable by looking into the Eye; there is to be an appearance of moats thread or hairs floating in the air before him. /

the Disease seldom occurs in very young people mostly about forty, but I have seen it in an infant. it often comes on without any external violence, I have seen one case follow a blow on another a Iridiasis.

A long list of medicines have been employed for the cure of catharact, and Mercury may be placed at the head of them without any good effect: this is best first because the operation is not so painfull, this is proved by comparative operations. the same patient has had the lens extracted from one Eye and depressed in the other

& when the Cataract is taken out it can never again obscure vision, but it may rise repeatedly when depressed or occasioning a return of blindness and each time the

operation must be repeated. it sometimes hang loose in the posterior chamber of the Eye when the Patient stoop causing blindness by its falling upon and closing the Pupil. it has been alledged than the lens may be absorbed but this is seldom the case.

3. When the Cataract is fluid it may be evacuated but cannot be depressed. I have known it to be entirely fluid it may be of the consistency of calves foot Jelly or of the White of an egg, not completly coagulated.

4. When the capsule is opaque as well as the lens it may be pulled out, but such opaque capsule cannot be depressed with the couching needle. the opaque capsule is by no means a rare occurence. it cannot be depressed because it stretche and bend down in that part in contact with the needle and after the operation, returnes to its place by its elasticity.

5° When adhesion exist between the capsule of the Lens and iris by opening the cornea they may be torn in extraction, but not in depression without injuring the Iris.

6 In one instance I saw the iris torn off. the inconvenience attributed to extraction are

1st opacity of the Cornea arising from the cicatrice but none exist when divided by a sharp Knife, with but one stroke. if Scissors be employed there is sometimes

an opacity but this is not before the pupil, and of course not impede the vision.

2. the passage of the lens through the pupil is said to stretche the Iris so irregularly as to form an irregular pupil. this sometimes does take place but it does not prevent vision, besides it occurs sometimes in depression the patient see as well afterwards as before

3 the hazard of cutting the Iris, in passing the knife across the cornea, unless the operator be very carefull in passing the knife straigh across the aqueous humour will escape through the section of the cornea & the Iris will fold itself upon the edge of the knife and part of it will be cut away. but this may be avoided by rubing the anterior part of the Eye which disengages the Iris.

4. the great danger than the vitrous humour may escape but this occurs only in consequence of undue pressure being made at the moment of the section of the cornea is finished. pressure at than time is unnecessary and should not be made. as every case of Cataract do not promise equal success it is of consequence to know when circumstances are unfavourable. when it is combined with other diseases the operation is improper the circumstance favourable to the operation are the Eye lids should be free from edema. the patient should be free from pain in the head, the pain has been much increased. the operator should not be deceived in exami

=ning the Eye. this may be happen from opaque spott in the cornea and a particular reflection of light from the Eye. he may avoid the former by looking at the eye side wey. the Pupil will be seen below the spott. in the latter the patient should be placed with this side to the window that the rays of light may fall obliquely on the Eye the pupils should contract and dilate freely. this contraction and dilatation however does not prove the retina to be sound and it may be sound and the pupil immoveable. If the Patient can distinguish light from darkness the operation may be avoided

in cases of immobility of the Pupil, when the retina is sound the iris probably adheres to the capsule of the lens.

I saw a case of a woman who had a cataract in each Eye the pupil moves freely in both. I operated and found both lens as hard nearly as stones. the Patient saw but with one Eye though the operation was performed equally in each. the Patient distinguishing light from darkness is not a certain test

before advising the operation it will be necessary to inquires if the patient subject to coughing or apt to vomit or sneeze. some old people sneeze violently. if the patient be subject to sneezing we should chose a time for opera=ting when he is least affected of it. I have seen pressure on the upper lip with the finger when the inclination for

sneezing come on suspend it.

I know a case where sneezing ruptured a vessel in the Iris hemorrhage insued which did not stop till a coagulation took place. this extended between the edges of the cornea and prevented this union. I was fearfull of removing the coagulum lest hemorrhage should again ensue, the Eye suppurated and the patient lost his sight

Sneezing might also force out the Vitreous Humor. Patients that are apt to faint on every occasion are bad subject they should take laudanum before the operation, as inflamation sometimes occurs to a considerable extent and may go on suppuration it is proper to keep the patient to a low diet for a few days and to reduce the inflammatory diathesis, it will be necessary to use bleeding purging &c for 8 or 10 days before the operation, a day or two before operating a blister may be applied to the back of the neck, the bowels should be open to prevent the inconvenience of rising for a few days. the best season for operating are spring and autum, cold or hot weather are not proper because in the first the room cannot be kept equally warm which expose the patient to the risk of taking cold, in the latter he is apt to be restless.

The Instruments for operating are first for making the incision of the cornea a knife after the

Direction of the Baron Wenell it should gradually increase in width from the point to the handle, it then serves as a wedge to prevent the escape of the vitrous humour it should be then but sufficiently firm not to be broken, the upper edge should be blunt tilt near the edge the edge very sharp, the knife should be very sharp it may be examined with a microscope or as much easier way is to look at it before a looking glass. In choosing a proper knife we should get one broader at the handle than the semidiameter of the Cornea.

2ly a little needle little curved at the point with which the capsule of the capsule of the chrystalline lens may be torn

3 a little Scoop of gold or silver to extract small fragments that may remain behind

4 a small hook to be passed through the Pupil and fixed into the body of the chrystalline lens for its extraction.

5 a small paire of forceps for the extraction of small fragments of the torn capsule that may remain.

it was the Customs of the ancient Surgeons to use the speculum. I use no instruments of this kind to steady the Eye the great objection to all instruments of this kind is that the occupy one hand of the operator. the Surgeon cannot see the anterior part of the Eye. besides they give pain to the patient and may excite inflammation. in proceeding to the operation I find it necessary while fixing the Eye to assure the patient the is no pain attending it. the Patient is seated on a low chair

with his side to the window or else the reflexion of light from the cornea will prevent you from seeing the Catharact. a bandage is applied round the head just above the Eyes having two depending compresses attached to it to cover the Eyes; than compress hanging over the affected Eye is tied up to the bandage. if the hair is long before it, should be cut to prevent the chance of its getting into the Eye and irritating it.. The Surgeon is seated on a chair considerably higher than the patient and taking the Knife into his right hand or left according as the right or left Eye is to be operated upon, he proceeds to making a section of the Cornea, the Patient head should be supported on the breast of an assistant who raises the upper Eyelid on doing this, the skin should be followed on the superior ciliary ridge so as to prevent its closing.. the tarsus should be forced against the frontal margin ridge of the socket the Surgeon pull down the under and trail till the Eye is steady at the moment he applies the Knife to the cornea at a bout one Sixteen of an inch from the Schlerotica. he only apply the Knife but do not puncture for at that time the Eyes generally receeds from the Knife, it should be followed by the Knife and the moment it becomes fixed, the puncture should be made. The Knife is to be carried across the Eye and brought out on the opposite side making a semicircular incision, if when the section is making by the discharge of the aqueous humour the Iris comes forward so as to endanger its being wounded, the motion of the Knife should be

stopped. and the Iris made to recede by gently rubbing the cornea the incision is then to be completed, than the Eye may not be the least pressed upon. the assistant who rise the upper lid should let it fall as soon as the point of the knife has passed through the opposite side of the cornea. in making the Incision never draw back the knife for if this be done the knife act no longer as a wedge to prevent the escape of the aqueous humour. if the knife is wide enough to cut itself out. but if owing to the mo=tion of the Eye or any other cause the knife should be drawn back, it would be advisable to desist from the Operation and to defer it till the wound in the cornea is healed

Baron Wensel advises to puncture the crystalline Lens during the section of the Cornea, by dipping the point of the knife into the pupill, this might be done if the Eye was very steady, but it is mostly so unsteady as to render the Surgeons direction impraticable. I prefer tearing the capsule afterwards with a needle, with this the capsule can be much easier torn and if should be opaque, it can then be much easier extracted in tearing the capsule care must be had not to injure the iris this being done the Eye must be closed to give it rest and that the pupil may dilate. after resting few minutes the Eye is opened by the Surgeon and gradual pressure made on the ball at the same time the divided portion of the cornea is raised a little by the scoop.

if the lens does not come easily through the pupil the Surgeon
~~better~~ hold of it with the needle or hook to facilitate its extraction.
~~the~~ moment it is out the lid should be closed and kept so
for sometimes. they are afterward opened and the state of the
pupil examined if the capsule be not opaque the patient see
if opaque the pupil remains white. The Surgeon should be
proceed to extract the fragments of the capsule; these are often
brought ~~into~~ the anterior chamber of the Eye and discharged
by gently rubing the lid over the cornea but if they remains
in the Eye the scoop should be employed, this should not be
pushed ~~too far~~ for fear of injuring the capsule of the vitre-
-ous humour. if the capsule of the lens is to be taken out
small forceps is the best instrument. sometimes the lens cannot
be extracted by any moderate degree of pressure, though aided
by the hook it is then probable its capsule adheres to the Iris
the adherion must be torn away by the needle, but this requires
great nicely. take care not to throw the Iris into the fold or it
may be torn. sometimes before ~~the operation~~ we know the
capsule is opaque we judge of this by spots of opacity appea-
-ring as through detached from the lens. in this case after the
section of the cornea (as it is known the capsule must be extracted)
I advise ~~the anterior~~ part of the capsule pushed up with a pair
of forceps, by pulling the whole membrane. it may be easily
taken out. The capsule is extracted first because it can be

easily laid hold of when the lens remains whole in the Eye. the Lens when dissected of the capsule fall to the bottom of the Eye. it may be extracted by a small hook. a small portion of the vitreous humour always escape. after removing a Cataract it is customary to exhibit various substances as watches and the like to know if the patient has vision but the Eye should not be kept open too long. during the operation none of the rela=tions of the patient should be present

a Dutchman who had been blind for seven years was operated upon for a cataract. his wife stood by during the operation, I was the first person he saw., the poor man burst into a flood of tears and it was with difficulty he was pre=vented literally crying his Eyes out. after the operation is completed a soft dry rag is to be applied to the Eye. on this a bandage should be carried round the Head; the patient is then put to his bed and ordered to lie on his back in order to prevent the escape of the Humours.. all light should be excluded from the apartment, the patient should live on vegetable diet, in taking drink he must not rise this head. a tea pot without a lid should be used for giving him drink: the patient hand should be secured by a piece of tape to the bed rails to prevent his rubbing his Eyes in his sleep in 8 or 10 days the Eye may be examined if pain or fever comes on use remedies to remove them. and change the dressing

every day. as the moisture than is discharged from the Eye is ~~discharge~~ ~~gd~~ absorbed by the dressings which becoming dry cause irritation when the dressing are changed always pull down the ~~Lunder~~ Eye lid: the hair if they have got into the incision of the cornea will prevent its healing.

On Hernia

Hernia may be defined a tumor occasioned by a protusion of some of the contents of the abdomen. this takes place in different parts of the body but most frequently in the groin owing to the parietes of the belly weakes at that part. opposite the groin there is a opening for the passage of the spermatic cord in men and round ligaments in women, through which the parts are protuded either the omentum or the intestines. this protusion may ~~may~~ happen at different parts of the body when the tumor is found in the navel it is called umbili=cal hernia, when in the groin bubonocele and in the thigh femoral hernia, in every instance it is caused by a protusion of some part of the omentum or alimentary canal.

In every hernia the protuded parts are included in a sac which is formed by an elongation of the peritoneum. There is one species of Hernia called hernia congenita well worthy of our attention. here the protuded part are in contact with the testicles. the tunica vaginalis which is properly a peritoneal covering of the testes pass with it, in its decent into the scrotum; the upper part of this sack gene=rally closes up round the spermacetic cord immediately after the decent of the testicles which is about birth sometimes two or

three days after or before. it sometimes so happens that this descent of the Peritoneum into the Scrotum does not immediately close up, after the descent of the testicle but remains open for sometimes and when it does not close up, by coughing sneezing crying &c. the hernia is produced. as there are several kinds of hernia I shall confine myself to that species called

Bubonocele

the symptoms are a swelling in the groin beginning at the abdominical ring and passing into the scrotum or labia pudenda. the testicle can be felt at the bottom of the scrotum; the tumour is soft and bears handling very well and when the patient lies down it disappears. pressure on the abdomen makes it more light and when the surgeon lay his hand on it, if the patient cough he will feel pressure made against his hand, causing a sensation as if distended with wind. there are some diseases with which hernia is likely to be confounded; as bubo, swelled testicle, lumbar abcess and Hydrocele; but by paying attention to circumstances it is very easy to distinguish between them. a bubo is generally proceeded by a chancre, it is hard and painfull and the tumour does not disappear upon lying down. it is likewise very easy to distinguish between bubonocele and swelled testicle

or hydrocele. in the former the testicle is hard and painfull to the touch. they are only found at the bottom of the Scrotum and the spermatic cord may be traced to the abdominal ring. at which place it is from swelling. In hydrocele the tumor begins at the bottom of the Scrotum and work upward. Whereas bubonocele begins at the top and work downward. the fluctuation may be felt in hydrocele and in swelled testicle. in Hydrocele we cannot reduce the tumor by squeezing it but to distinguish bubonocele from hydrocele is sometimes more diffi=cult I have seen the testes envelopped in a cyst. when the patient shaved hard was protruded and the testes where at the bottom of it. Hydrocele is in general Diaphanous.

a case come under my notice which was supposed to be Hernia and as such was treated. I was convinced of examining it that it was hydrocele it was diaphanous admitting the light to pass through the tumor and was cured by taping and afterwards by injecting wine

In the lumbar abcess the matter passes from its seat in the psoas muscle, down under poupart's ligament following the course of the muscle and form a tumor in the upper & anterior part of the thigh at which place the fluc=tuation can be felt, and the tumor can be pushed from the thigh up into the cavity of the abdomen and vice versa If your hand be laid on the abdomen and pressure made

the tumor on the under part of the thigh will be rendered more full and tense. the great danger liable to take place in hernia is from great inflammation which issues from the stoppage of the circulation and of the faces in consequence of a stricture commencing on. this stricture may be formed either by the neck of the sack or by the tendons of the oblique muscle. when the existence of a rupture is ascertained it should be reduced and supported by the application of a truss. not unfrequently the patient can reduce it himself but when he cannot, the Physician by laying him down in a horizontal position for the part can effect it after which a truss should be applied on the soft part of the pubis so as to press the spermatic cord occasioning great uneasiness to the patient, if continued for any length of time. or applied so far to the groin as not effectually to close the orifice. the best way is to examine exactly with your finger tracing the tumor into the abdomen and when you find the orifice apply the truss. so that the soft part will be directly over it just above the upper edge of the pubis. Trusses are usefully employed at a particular age. but they should be employed when necessary at all ages.

Strictures sometimes prevent the reduction of the protruded part. but we cannot always reduce them when there is no stricture. and this for several reasons,

1st. because too large a quantity of bowels have collected in the tumor to allow of their being returned

2 the next difficulty in the reduction is from an attraction of a part of the omentum.

3. from adherion taking place between the protruded part and the side of the opening or from the adherion of the obtruded part among themselves.

When difficulty of reduction arises from adherion or in the last case it will admit of no remedy only being supported by a truss. when adherion takes place so that the surgeon is unable to reduce the tumor a sack made just so as to contain it should be applied or else the hernia will continue to enlarge till it get to a great size.

I saw a case in which the sack had got down to the testes. if the patient in such a situation neglect the truss he is not only in great distress but in danger of strangulation. the symptoms of strangulation are increase hardness of the tumor, obstinate costiveness, pain if the patient stand up a hard contracted tense pulse and sometimes vomiting, and the tumor becomes painfull to the touch. when called to a case of strangulated Hernia, it requires great attention. In proceeding to return the protruded parts the patient should be placed on a firm bed or matrass with his buttock raised considerably

higher than his head and the thigh bent upon his body to relieve the muscles, when this is done squeezing the protruded part cautiously with your hand so as not to hurt the bowels, when the patient can do than himself it is best, as he will be likely to use less violence so as not to injure any of the parts. This operation is called taxis if this if not sufficient bleeding copiously is of use and Mr Pott advise to continue it ad deliquium animi. and then try if it can be accomplished. The bleeding tends to prevent any inflammation. I have not however seen one case of bleeding ad deliq animi where the reduction succeeded immediately after. Cathartics are then generally given. I have found Cream of tartar given with about 8 or 10 grains of Dolap. and on drop of minth efficacious very well. along with this the warm bath should be used, the patient should be kept in it till it becomes very weak and while in the bath the Surgeon should try to reduce it. This from producing a general relaxation will I have no doubt succeed frequently. I have therefore an high opinion of it in strangulated Hernia. When all these remedies fail injections made by a decoction of tabaco (℥i to a pint of water may be used. This decoction is to be known when thrown up to or to occasion nausea and general relaxation. Great care is necessary in administering this remedy it should be given in small quantities at a time untill the desired effect is produced this is the most succeffull remedy in strangulated hernia the fumes of tabacco are not so convenient as they require a

peculiar apparatus and sometimes they excite spasms. when all these methods fail the application of Ice or snow has proved usefull Strangulated Hernia has been reduced by cold this remedy is particularly recommended by Mr Wilmer. I could not hesitate to employ it when other remedies fail. it should be continued for sometimes, perhaps for the space of three or four hours if necessary. according to the degree of cold applied care should be taken not to fribe the part., if these remedies fail we must have recourse to an operation. for if the patient is not relieved by some means or other he soon grows worse. the sickness become more distinguished, the pain is more intense, the belly swell the fever run higher hiccup cold sweats &c occurs. but after a while these symptoms cease and the patient think himself getting better and in some instances the contents of the tumor goes up but the symptoms return worse than before and death quickly close the scene from mortification of the intestines coming on.

it is difficult to tell when is the exact time for performing the operation, because sometimes the bowels mortify from the pressure in a short time and at other times the patient will bear it from four or five days and then get well. but in general I would advise if the above remedies fail, to perform it in at most 30 hours after it commencement if the strangulation remains.

I have once succeeded in reducing the tumor after

all remedies failed by rising the foot of the bed considerably the highest in this case the humor receeded voluntarily during the night.

There are two Methods for operating for Hernia and first for bubonocele.

In proceeding to perform this operation the first precaution is to shave away the hair, then make an incision in the direction of poupart Ligament about four inches in lenght and dissect up that part laying the tendon of the external oblique bare so as to expose the ring. this done puncture the tendon in the direction of his fibres at a small distance about an inch from the ring. a director is introduced at the puncture and passed out at the abdominal ring: the part of the tendon lying over the direc=tor is divided lenght ways of its fibres; an attempt is now made to reduce the content by taxis! this pratice has been disapro=ved by surgeons who says that the content of the sack may be in such a condition as to forbid reduction. and that the sac should be opened to examine its content. for says they if any of the part be killed, or the sack contain acid serum and be returned in this state into the abdomen, it would occasion great inflammation, but I would ask those surgions if they would not before the operation use every exertion to reduce it and in the present case if it can be reduced, it will prevent the necessity of opening the sack by which the risk of peritoneal inflammation will be avoided. Opening

the sack would produce a communication for the air to the cavity of the abdomen all such communications are attended with violent inflammation which mostly terminate fatally on the third day or sooner.

Should the attempt to reduce the protuded content prove ineffectual the operation must be continued. the incision is continued down to the bottom of the Scrotum and the sack is laid bare. after this attempt to Scratch trough the Scrotum should be repeatly made with the point of a Scapel trying with a probe after each Scratch so see if a puncture be made. When a puncture is made introduce a director and with a blunt pointed bistoury enlarge the orifice so as to admit the finger, which is the best director for the knife after this the sack is divided the whole length from the ring. next examine the content of the sack, which if sound must be carefully returned into the abdomen. this at time cannot be done for three reasons

1st adhesion.

2 a change in some of the protuded parts

3 a Stricture in the neck of the sack alone

When it cannot be done on account of a Stricture in the mouth of the sack, the Stricture is to be divided; taking care not to wound the intestines. the finger should be introduced as far as possible for a director for your knife and in

general the mouth of the sack is not so small but that the finger may be introduced a little way. sometimes adhesion take place so that the intestine cannot be reduced when the sack is laid open, these may easily separated either by the finger or by the handle of the scapel. if the protruded part be altered in his shape the ring must be dilated to admit of its return. except it be formed by the omentum, then the altered part may be cut away. if a mortification of the protruded part has taken place it should be separated and the sound part of the intestines joined by the interrupted suture and sewed out to the side of the wound. notwithstanding the faces will for some times escape through the orifice, it will mostly in the end heal well.

Although in bubonocele it is best not to open the sack when it can be avoided yet in femoral rupture I believe it is safest to open the hernial sack and then and then to divide the stricture. the sack here is internally thin and scarcely to be seen. in proceeding with the operation a great deal of caution is necessary to prevent wounding the intestines, when cutting near the neck of the sack care should be had not to cut to either side. because on the out side of the neck of the sack passes the Epigastric artery and on the inside of it the Spermatic cord: crossing each other directly at the stricture part so that if you cut towards the inside

you will cut the spermatic cord and if you cut toward the out side the Epigastric artery and if posterior the great blood vessels. To remedy this Mr Gimbernat proposed to dilate the stricture by making the incision toward the pubis. The best method is after opening the sack to introduce a director or your finger which is better along with your bistoury bearing its edge looking towards the pubis, when you come to the stricture the incision is to be made towards the pubis dividing the stricture so as to cut behind the spermatic cord.

Dr Abernethy advise to cut from the neck of the sack toward the navel, so than by keeping than direction you meigh dilate the stricture towards the angle made by the epigastric artery and spermatic cord and there by avoid cutting either. Mr Hay suppose than the femoral ligament former the chief obstruction to the reduction of the protruded part.

I will advise you to read Mr Pott, Hay, Hooper on this subject. Sometimes the finger cannot be introduced on account of the smalness of the aperture, when this happens introduce a director under the stricture and then with a bistoury lay it open sufficiently to reduce the protruded parts. If the protruded of the intestine is found to be mortified, than part must be removed (taking care not to cut through a sound part than Dead portion may be completly separated) and the sound part stitched to the side of the

side of the wound. So that the intestine may protruded about an inch. the protruded part will in time as the wound heal retract within the cavity of the abdomen and as they are drawn in the edges will come nearer in contact, till at last the will unite and form a perfect canal completly within the abdomen, and the patient will discharge the faeces in their natural way. Sometimes the omentum is found in a spacelous state. it should never be returned so into the abdomen or else the dead part will cause peritoneal inflammation.

The folds must be spread out and the mortified part, separated with a pair of scissors. if any artery is wounded or divided it must be taken up leaving the thread sufficiently long to reach out of the abdomen. Mr Hay has proposed taking off this portion with a ligature, tying it so tight as only to indent the omentum at first and then daily lightening it till at last it is completly separated and when the gangrenous part is protruded down through the omentum his Method is a very good one.

On Hydrocele

Hydrocele is a term applied to a disease consisting in a preternatural collection of water in the Scrotum. of this disease there are three species.

The first is an effusion of water into the cellular Substance of the Scrotum (the cells communicate)

The second species is when the water is contained between the tunica vaginalis and the scrotum. The tumor has a doughy feel & deep indentation may be made with the fingers. the skin is nearly of its natural colour and is diaphanous, the skin of the penis also becomes distended. if the patient lie down no diminution takes place in the bulk of the tumors, the swelling begins at the bottom of the scrotum. The Testicle can be easily felt at the beginning of the disease and likewise the spermatic cord and no fluctuation can not perceived. The second kind or thaw of the tunica vaginalis is owing either to an increased action of the absorbents. The swelling in this species begin at the bottom of the Scrotum soft at first but generally grows more tense and cannot be reduced by pressure though it sometimes collect suddenly from a rupture of a Lymphatic. The tumor is small at first in which state the testes can be readily felt, but when the tumor is large it is not perceptible.

On Hydrocele

Hydrocele is a term applied to a fluid accumulation in a preformed collection of water in the abdomen, other than those due to tumors.

The first is due to effusion of water into the cellular lining of the abdomen (the cell connective).

The second pure is when the fluid is contained between the tunica vaginalis and the testicle. The tumor has a fluctuating elastic consistency, may be made to fill the tunica, the skin is usually of its natural color and is diaphanous. The skin of the scrotum also becomes distended if the hydrocele is large, the distention takes place at the bottom of the tumor. The swelling begins at the bottom and the testicle can be easily felt at the beginning of the disease. Out lifting the hydrocele and applying a light pressure the second sign of the tumor is capable of being felt. In an increased action of the abdomen. The swelling in this pure begins at the bottom of the abdomen. It is first and generally more tense and cannot be reduced by pressure. Usually it accompanies other abdominal pain or a rupture of a peritoneal. The tumor is small at first in which the testicle can be easily felt, but when the tumor is large it is not perceptible.

The fluctuation can readily be perceived and the tumor is diaphaneous. the disease most likely to be confounded with it is the Hernia it is however easily distinguished from hernia as in it the tumor begins at the bottom of the Scotum and extend upward but in hernia it begin upward and extend downward.

Hydrocele is always permanent, where as in Hernia the tumor often disapear when the patient lies down. Sclirhous of the testicle has sometimes been confounded with it. we can distinguish Hydrocele and Sclirrous Testicle by the latter having a swelled spermatic cord and in schirrous the tumor is flattened and is harder than in hydrocele. it is scarcely possible to confound it with Hernia humoralis this kind of hydrocele is however very complicated and requires much attention to distinguish between it and other diseases.

The 2 species is when Water is contained in one or more Cyst of the Spermatic cord. there the testicle can be felt to the bottom of the Scrotum. the tumor is Diaphaneous and swell up to the abdomial ring. and in one case I believe the tumor extended through to the ring itself in such cases there is much difficulty in distinguishing from hernia. only if we press the tumor so that the water is forced into the abdomen the instant we take away the pressure it will return again than pressure on the side of the tumor cause no difference of the former, but will often succeed in removing the latter

having mentioned three different species I shall now proceed to the

Treatment

No inconvenience results to the patient from hydrocele but what arises from weight or bulk of the tumor: though in hot weather the skin excoriate and if the patient walk about it cause pain in the back from the weight this is relieved by the use of a suspensory bandage which sits so easy and is worn with so little inconvenience that some people refuse to submit to the operation.

The first species which is that of anasarcous hydrocele is generally cured by medical means. it however at time happen that an operation for discharging the fluid is necessary for the cure. this I should advise to be done by means of a small puncture made with the point of a lancet that it may ooze out. this is preferable to making an opening with caustic or the introduction of a seton or making deep incisions which may produce mortification. the punctures are to be covered with dry lint they should be made in four or five place. Sometimes an anasarcous tumor is produced by the bursting of the tunica vaginalis.

a case come under my care in which while the patient was sitting still felt something break in the

Scrotum and shortly after an enlargement appeared which was soft and diffused itself generally over the Scrotum. The skin became black which very much alarmed the Patient as he supposed mortification comming on. The Physicians were called in who not under standing the case were suspicious that his apprehension were too well founded. Mr Hunter supposed that the tunica vaginalis was ruptured and that the colour was owing to the escape of the blood this proposition was readily agreed to, and the Patient was informed that in time the blood would be absorbed and the wound in the tunica vaginalis healed. but that he would be subject to a return of the complaint all which turned out has had been predicted.

Hydrocele of the tunica Vaginalis.

Dr Elliot mentions a case of the hydrocele of the tunica vaginalis which was cured by purging. I have cured it by ren=ding water to be poured on it out of the spout of a tea pot two or three times a day. this method will often succeed in Children, sometimes it is absorbed without any aid. when all these fails it is necessary to have recourse to an operation relief may commonly be obtained by evacuating the water, this is done by means of a common lancet or trocar which con=sist of a silver tube in which is a stillet projecting beyond

ne Canula about an ½ inch which part is triangular and shorp for cutting. the trocar is to be pushed through the Scrotum into the cavity of the Hydrocele. when introduced the Stiller is withdrawn to suffer the water to pass off after which the wound is closed by applying a strip of adhesive plaster and the parts supported by a suspensory bandage, this is only palliative and is not sufficient to cure the disease completely, but to produce a radical cure it is necessary something more should be done

There are several modes of effecting a radical cure the object of them all, is to effect union between the tunica vaginalis and testes, of which I shall now only mention four

the most ancient of these is to make a long incision through the Scrotum so as to examine the state of the testes when it is ascertained to be free from Schirre, lint is applied in the cavity between the tunica vaginalis and the body of the testes to excite an inflammation of the part so that the two surfaces may unite together, the lint is to be left in till suppuration takes place freely, then it is to be extracted. when the tunica vaginalis adheres to the testes forming an union with it. this frequently succeed but it is attended with great pain and inflammation. and it does not unfrequently happen that abcess form after the patient is thought to be well. I have seen abcess formed in the Scrotum in course

=quence of thread being left behind. Six weeks after the wound was healed up. this I have seen once but it frequently happen after this treatment

The next Method is by means of an eschar formed by means of Caustic. this is not only attended with great pain and inflamation but cause a large suppurating sore to the no small distress of the Patient.

Mr Elles has proposed applying it only in size of a Shilling which he think would be sufficient to excite inflammation of the whole cavity, but this often produce violent inflamation of the whole Scrotum and sometimes mortification. this Method is seldom used at present

The Next Method is to pass a seton through the Scrotum between the tunica vaginalis and testes, this Method is recom=mended by Mr Doll but it is exceptionable because sometimes the adhesion will take place only at the part which is in contact with the seton with the tunica vaginalis and the Disease may again occur and likewise when there are cysts in the body of the testes this treatment will not do, and there cannot be opened without tying open the tunica vaginalis, but the cure must be effected by suppuration Mr Earl has revived the method of throwing stimulating injections into the Scrotum, he cause the urine to be diluted with one half of water. I have always used it diluted with water.

Some advise a solution of White Vitriol and I have no doubt but it would answers very well. Some have advised a solution of corrosive sublimate but if this is employed it should be used very weak. after the water as been drawn off; an injection of wine may be thrown into the tunica vaginalis; this will sometimes cause a good deal of pain about the lumbar region and has produced Syncope. it should soon be let out perhaps after two or three minutes. Inflammation will come on in about two or three days but never run very high and soon subside without any trouble; if it should run very high V.S. may be necessary. frequently in the operation of inflammation water again return in all cases of this sort I have effected a cure by pouring cold water over the part to the quantity of about half a Gallon per day. When the first operation fail it is not so severe but than the patient will mostly mostly submit to it again. When one or two injections will not do Mr Hunter prefers making an incision about an inch long in the anterior and upper part of the Scrotum so than the finger may be introduced to ascertain if any hydatids exist. and fill the space between the tunica vaginalis with four small boles of Dough to cause an equal suppuration over the whole cavity after four or five days suppuration will have taken place at which time the dough will become soft so as to rassemble pus in consequence of wiping itself with the fluids thrown into the cavity. . the contraction of the Scrotum which

take place will throw out the Dough gradually and regularly adhesion will take place and the cure effected.

I have performed this operation several times and believe is to be the best mode of curing the disease.

I now shew the operation of injecting it with wine. The instruments are a trocher which consist of a silver canula about three inches long in this tube is a little stiles projecting out about 1/8 of an inch beyong the end of it. a cork with a bladder or a gum elastic bag fixed to the end of it for containing the injection. the Patient is seated on the edge of a chair and directed to grasp the bottom of it with both hands because if his hands are at liberty he will be apt to disturb the Surgeon. when fixed in this manner so that the scrotum project over the edge of the chair the operator takes hold of it and causes a tenseness in that part of the tumor where he wishes to make the puncture and then push in the trocher as soon this instrument has entered the cavity the stillete is withdrawn and the canula pushed further in to prevent the tunica vaginalis slipping off the end of the tube which would prevent the water from passing out when the water is drawn off an injection of port wine is thrown in retained a while and then suffered to run out, the wound is closed with adhesive plaster and the Patient put to bed.

care must be taken to keep the canula through the tunica vaginalis when you inject or else the whole of the contents will be thrown into the cellular substance without effecting its way into the proper place and a new operation will be necessary. Care should also be had to examine well where you puncture the Scrotum. to avoid wounding the testicle which too often happens.

A Gentleman troubled with hydrocele called in a Surgeon to his aid, who performed the usual operation with a trochar but to his great astonishment no water flowed upon his withdrawing the stiletto. another Surgeon was called who likewise performed the operation near the same place but with a similar success., a third Surgeon was called but with the same disapointment as the others. they agreed it was a very difficult case to understand. Mr Brunter's aid was then desired who upon examining the case and recollecting the peculiar sensation the testes give when squeezed; though he could not feel its situation, yet by the sensation caused by squeezing he found the testes to be attached to the Scrotum at the anterior part just where they made their puncture. the trochar has been pushed in the body of the testes. he then punctured the Scrotum at the lower back part where the testes always lie and the water flows out as is usual in the common cases ——

On Lythotomy

Calculus concretions are found in different parts of the body, I have found one of the bigness of a pea at the root of the tongue, they are found in the salivatory duct, in the kidneys, uterus &c but they are most commonly found in the organs of the urine, the incrustations found deposited on the sides of the vessels which hold urine proves that the calculus substances it contains may readily form a stone. the quantity of calculus matter varies in different persons and it is greater at one time than another in the urine of the same person. it is not my intention to inquire into the circumstances which dispose the body to the formation of calculus, it being sufficient for my purpose to know than it can be formed by a disposition from the urine. I have seen a calculus concretion form on the end of a catheter than had remained in the bladder but for a few days. the different kinds of matter which has been found in the substances of the calculi prove sufficient than any kind of solid substances remaining in the bladder for a few days may be a nucleus for a stone. the stone is not always one uniform consistence but consist of several laminæ, some which are hard

and some are soft they are likewise of different colours some are white and some are of dark brown.

The reason of this difference I believe has never been satisfactorily acounted for. Stones are not exclusively found in the bladder, they are found frequently in the kidneys and prostate gland I believe they most frequently originate in the kidneys and is washed down the ureters into the bladder though this is not always the case. When in the kidneys it occasion pain in the small of the back.

A case of this kind was cured in a gentleman by riding from Germantown to Philadelph. on horse back but he was the same day affected with a stone in the bladder.

When stones are found in the kidneys. there is a considerable difference from what happen when found in the bladder. Mr Bloomfield has described the symptoms so accurately that I shall give them in his own words when they exist in the bladder they distend that viscus by preventing a discharge of urine but when in the kidneys they prevent the urine from flowing into the bladder. the stone frequently lodge in the ureter in its passage from the kidney to the bladder occasioning a great accumulation of urine in the ureter and distension of the ureter above the lodgement of the stone fill the collum of urine and the distention be so great as to force it down into

the bladder. the Stone frequently lodge this cause a good deal of pain, but when it is washed down from the ureter into the blad=der the patient is much easier. the Stone is sometimes lodged between the coat of the bladder producing great pain and the itching are violent.

When the Patient complain of burning and pain in the bladder we have then reason to believe the stone as found its way into it. the Patient should drink plentifully of barley water and endeavour to pass the stone by urine. When a stone exist in the bladder the patient feell an itching sensation of the gland penis together with pains and heat in the blad=der at the place where the Stone is lodged. the stream of urine is suddenly stopped at times occasioning great pains by the falling of the stone on the orifice of the urethra and at other time, it flows in full stream. any uneasy sen=sation is felt all along the course of the urethra between the perineum and glands penis. through something has lodged in the passage occasioning the patient to pull and squeze it causing thereby an elongation of the prepuce and penis both. Sometimes it is attended with tenesmus and prolapsi ani. the urine is pale and often mixed with blood the gestation is interrupted occasioning flatulency, costiveness weakness and fever and if the stone be not soon removed death takes place.

Though these are the symptoms that generally attend Stone in the bladder yet they do not prove it unequivocally, as they sometimes occurs from other causes as inflammation and ulceration of the neck of the bladder or ulcers and tumors of the Scrotum.

A Case of a young woman came under my care with the above described symptoms who was sounded three times but without finding any stone, after which Mercury was prescribed and the patient in about three weeks got well in this case I suspected there was an ulcer of the bladder Hemorrhoidal tumors not infrequently causeut these symp=toms. Sometimes the stone is encysted and the patient experience no pains because when he moves about, the stone is prevented from falling on the neck of the bladder. when the patient discharge small pieces of matter we may expect the existence of stone. mostly the stone can be felt by sounding which is the surest way of determining its exis=tence. for this purpose we use an instrument of Iron called a sound. Though the attempt of the sur=geon to feel the stone may sometimes be frustated by its situation being behind and below the neck of the bladder, but if the surgeon introduce his finger into the rectum and pren than part of the bladder up he will be immediately able to feel the stone.

Many different remedies has been employed for the cure of the stone but they generally does not good. differente substance has been taken into the stomack for than purpose and other have been injected into the bladder as a solvent for it but all of no use Strong alkaline solution are found to dissolve stone out of the body and these have been advised for the cure of the stone. The most usual substances taken into the body are aqua nephritica alkaline. aqua calcis, uva ursi &c Medicines have been advised to be injected into the bladder to dissolve the stone.

Our great objections to medicines used as solvent is that they may occasion the coat of the bladder to slough off and thereby endanger the life of the patient.

The Carbonat of Potash has been serviceable in some cases lime water is usefull sometimes to ease the pains

Uva ursi has likewise been given for than purpose

Blood letting and opiates are the best remedies for a fit of the stone, also warm bathing. When these substance than are employed fail the Operation of Lythotomy becames necessary for the existence of the patient

before proceeding to the operation in cold weather we should dip the sound in warm water to prevent contraction of the parts. The Patient should be laid on a table or some convenient place and the Surgeon proceed to introduce the sound (after oiling it) with the concave

part turned forward the bladder if its not easily introduced in this manner turn the convex side next to the bladder and try again. frequently the sound will pass till it comes to the membranous part of the urethra and then suddenly stop. no force should be used to gain an entrance lest the sound be forced out of the urethra into the soft part. to avoid the fold in the urethra, which stop the sound, the instrument is to be turned round with the concave side up, in such a manner that it shall revolve exactly on its axis. Some Surgeons turn the concave side of it to the bladder and present in that particular tray for its introduction as thoroughly pursue the opposite way. this arise altogether from prejudice because they have always been used to do it that way. the tray in which the silver catheter is introduced is so similar to the introduction of the sound that I shall not take up any more of your time in describing the introduction of it. When the sound is introduced into the bladder then turn it in all directions if you do not find the stone pass it farther up the bladder if its not yet felt cause the patient to change his situation frequently when the stone has eluded the sound by placing the patient on his hand and knees it has been directly felt. When its existance has been fairly ascertained the operation may be performed.

About two weeks before the Operation the patient should attend to his diet and live low and a

day before the operation a glister should be administered. Some Surgeons advise to empty the bladder before the operation but I should advise to let it be moderately distended with urine which will render the operation easy.

The Instruments

Those necessary for the Operation are first a table of about the ordinary height. I generally use a common dinning table whatever table is used it should be narrow so that the assistants can have an opportunity of holding without leaning over it which would tire and prevent them from holding steady; a blanket or something of the kind should be spread over it, and a pillow applied to support the patients head. It will be necessary to be provided with some warm water and likewise some sweet oil, also ligatures and a tenaculum for taking up the arteries that may be cut. Ligatures must be provided to tied the hands to the feet to prevent the patient kicking worsted binding answers very well for that purpose. Next a grooved director, a scapel a sharp pointed bistouri and a gorget to divide the neck of the bladder. the point of the Gorget should be so as to play easy (which is of great consequence) in the groove of the Staff which is to be very clear of blood

or inclinations malles and very smooth forceps there are of different shapes and size. I should prefer the smaller ones, to those that have large ends for grasping the stone. if the small forceps are not strong enough for extracting the stone a common scoop such an accoucheur use for extracting the head of a child may be introduced by the side of them and assist in drawing out the stone. Sometimes the stone is not sufficiently strong to bear the extraction, but breaks in pieces the the small forceps are much the best. if any pieces are broken off it may be readily seen by examining the part extracted. a Syringe has been found of service in cleaning the bladder of small pieces of stone by introducing it through the wound and injecting warm water into the bladder which will wash away every small piece that remains. it is necessary for the edge of the gorget to be very sharp at the back else some force must be used to penetrate the bladder by which the gorget may go too far and wound the fundus of the bladder. an accident of this kind accidently happened to Bloomfield, the reason why this part of the instrument is mostly dull is because the cutler cannot get to it to sharpen it on account of the back to remedy this inconvenience I got some made so that the side can be taken off leaving the back only behind. when taken of in this manner they can be sharpened at the point as easily as at any other part. the sides are fastened

one by means of a knife. The old form of a gorget used to be
but one edge i.e. having an edge sharp and the other blunt
but they are now made to cut on both sides of
the neck of the bladder as they be divided. The knife also
is now from the back to a curved manner. I cut I prefer them
that forming an acute angle.

I shall now show the mode of operating

after the director is introduced the patient is directed to take
hold of his ankles or his knees. The surgeon passes the ligature
which must previously round his waist and secure the left hand
round to its respective foot on each side. Two assistants stand
on each side of the table and each take one knee of the patient
in their right grasp his foot with his disengaged. Another assistant
takes hold of the director and draws it to the right side
that the surgeon then holds away the scrotum from the perineum
in which he makes an incision from above downwards between
the anus and the on the left side having
cut thro' the skin and cellular substance he sets for the staff
then take a sharp pointed bistoury placing the finger
upon the stone and to prevent your cutting it and
cut towards your finger till you find the stone then
with the bistoury keeping the back on your finger and put
the point in the groove of the staff taking hold of the
handle of the staff with the left hand and bringing it

on by means of a screw. The old form of a gorget used to be but one edge. i. e. having on edge sharp and the other blunt but they are now with two cutting edges so that both sides of the neck of the bladder may be divided the edges used also to run from the back in a curved manner but I prefer them straight forming an acut angle

I shall now show the mode of operating

after the director is introduced the patient is desired to take hold of the outside of his heel when the surgeon passes the ligatures which were previously round his wrists and round the feet each hand to its respective foot on each side. two assistants stand by each side of the table and each take one knee of the patient in his axilla, grasps the foot with his hands. another assistant take hold of the director and draws it to the right side the surgeon then holds away the scrotum from the perineum in which he makes an incision from above downwards. Be=tween the and the on the left side having cut thro the skin and cellular substance full for the staff then take a sharp pointed bistoury placing the finger upon the spin ani to prevent you cutting it and cut towards your finger till you find the groove. then with the bistouri resting the back on your finger and put the point in the groove of the staff taking hold of the handle of the staff with the left hand and bringing it

at a right angle with his body. an assistant then takes hold of the Scrotum and draw it up, the Surgeon then bear down the handle of the gorget and push it up into the bladder, the urine then in the bladder now escapes, when the gorget has got into the bladder the staff is to be withdrawn, before the gorget is withdrawn introduce your forceps then take away the gorget drawing it carefully so as not to make a new incision.

the handle of the forceps should be returned upwards as gravity will cause the stone to fall to the lower part of the bladder. the forceps should never be held in one hand, when you have got hold of the stone introduce the scoop by the side of the forceps to loosen it in any part than may be entangled and to place the stone in the best and easiest way for extraction of the bladder. when the stone is extracted examine if any more be left in the bladder or if any pieces are broken off the stone in taking it out, if any extract them. if any vessels be cut use the common means for securing them, the patient is now untied his knees put close together and laid on his side in bed

not unfrequently as you are about to push the gorget into children they are seized with a straining fit. the diaphragm and abdominal muscles press the viscera of the abdomen on the fundus of the bladder and force it on the neck of the bladder. If you push in the gorget

during a straining fit you will very frequently cut the fundus of the bladder. If it comes on when you have divided the neck of the bladder and the urine evacuated it will be safest to withdraw the gorget.

The Operation of Lithotomy is most simple in female. Some have advised to introduce the staff into the bladder and then with a bistoury make an opening into it from the vagina and extract the stone from the bladder through the vagina. Sometimes this mode of operation answers very well. I myself have performed the operation in this manner and the wound healed very well. I however prefer the gorget.

On Amputation

I told you when treating of wound that when the parts were so injured that they could not recover, amputation becomes necessary. if it be deferred till inflamation has supervened we must wait till it has subsided amputation likewise becomes necessary from tumors as white swellings of the joints. disease of the joints often produce hectic fever and the patient come more much debilitated from night sweat, loss of appetite &c and amputation, is necessary for his restoration. if the patients stomach be good never fear to operate though he be much emaciated. The ancient surgeons advise amputation when mortification had taken place and while it was still progressing this practice should always be avoided because if the limb should be taken off in the progressive state of mortification the stump will be attacked and the patient be obliged to submit to another operation, but if the surgeon wait till the mortification has stopped and the dead part separated the bone only will remain to be cut which will give but little pain to the patient.

Another cause of amputation is large tumors causing the absorption of bones or joints, also fungous hematodes.

I shall now mention the manner of operating, some

=times we have to amputate the finger; if the disease is at or near the ends of the fingers it will answer very well at the first or second joint so than a portion of skin may be left to cover the end of the bone. this done the edges of the skin are to be brought in contact and kept in this situation by adhesive plaster and secured by a roller which as the arte=ries are so small will be sufficient to prevent hemorrhagia sometimes the finger has been taken off at its articulation with the metacarpe bones, all than it is necessary then is to cut down between the fingers till you come to the joint. then after the finger is taken off and the vessels secured bring the edges of the skin together and apply adhesive plaster. a roller is then applied round the hand. sometime we have to take the metacarpal bone away, this may be done either at its arti=culation with the carpus or saw it off at any place when it is necessary with a metacarpal saw, first separating it from the other parts by making an incision directly over the middle from the finger down to the place where you mean to take it off. if any vessels are cut take them up with a tenaculum; bring the edges together and secure with adhesive plaster and apply a bandage round the arm.

Amputation of the Leg.

First of the things necessary to perform the operation. a Compress bandage, a tourniquet: these are to be applied if the leg is amputated just above the knee. but if the thigh is to be taken off this should be applied near the groin.

a sharp knife this should be very sharp else it will only mangle in some places and cut in another. for if it is dull the skin will be thrown in folds before it and the surface of the divided edges will be very ragged and unevenness. a scapel will be wanted. a cattlin this is a knife with two edges. a retractor this a piece of leather with three tails the middle piece is passed through between the tibia and fibula to hold back the soft parts when the bone is taken off. a saw for cutting of the bone. it is necessary that the saw be not wide else by binding on the flesh it will be able to break off the bone before it is cut through having portions to be broken off with nippers. a paire of nippers to break off any specula that may remain, a tenaculum. besides these it is necessary to have some warm water, sponges, needles ligatures lint adhesive plaster cerate and two bandages of linen called tourgets.

in proceeding to the operation the patient must

be laid on a table covered with a blanket or a firm matras the compress is first laid on the artery and then the tourniquet applied to stop the circulation. about an hour before the opera=tion the patient should take a dose of Laud anum not so much to ease the pain as to give him fortitude and fit him to undergo the operation, because some patients cannot stand it.

I have seen one patient faint three times under the operation, screw the tourniquet till the circulation is stopped in order to ascertain whether this is effectual I commonly apply my finger to the anterior tibia artery, while the assistant screws the tourniquet when the injury is low down near the foot the surgeon has his choice where to operate. if it is a person of high life who want to have the appearance of two legs and go in company, and who can afford to get an artificial leg it may do to operate as far below the knee as convenient. but if it is a poor man who has to undergo hardships he can but ill afford to have an artificial leg. and should have the operation performed just below the knee he can then bend his knee and bear is weight on it without much inconvenience from the projecting stump which would be very much in the way were the leg taken off at the ankle. this inconvenience arising from the stump projecting so far behind is so great that the person subjected himself to second operation to get rid of it

In proceeding to operate let an assistant drawn up

the Skin first then take a Streight knife an make an incision round the leg it is not necessary that this should be all at one stroke as some Surgeons advise. I have seen a Surgeon place himself in such a position to make an incision at one stroke that I was really afraid than he would cut a piece of his own nose off which tought have been done by the least slip as the floor was sanded to catch the blood.

Some Surgeons advise to make the incision straight through to the flesh but I would advise to make it obliquely so than the flesh on the back part of the leg may be brought in contact with the Skin on the fore part and completly cover the end of the bone. after you have cut round the Skin and cellular mem-branes dissect the teguments from the muscles and turn them back if this cannot be done they must be drawn back and divide the muscles down to the bone. this done take a Catlin and divide the inter osin ligament and muscles and pass the middle strap of the retractor between the bones to draw back the soft part then saw off the bones, some advise to cut both bones at once this is often inconvenient I mostly saw the fibula first from the tibia. it is necessary to make long strokes with the saw least the teeth gets clogged. after the leg is off wash the surface with warm water and then search for the principal arteries which must be drawn out with a tenaculum and secured by ligature. after all the arteries than can be seen are taken

up the tourniquet should be loosened to see if any of the flesh arteries bleed. warm water should be poured on the part and the patient should have a little wine and water to excite the circulation and oppose all the bleeding arteries. When all are secured wash away the whole of the clots of blood and draw down the integuments over the end of the bone and wrap a bandage round the Stump to prevent contraction of the repeh. Secure the edges of the wound in contact by means of adhesive plaster. before these are applied the Ligatures are to be brough out at one corner of the wound a piece of lint spread with cerate is to be applied between the edges to prevent union by the first intention for if the unite before the ligature comes away, they will prevent the same from being thrown out and a abces will be formed causing great pain to the Patient after the adhesive plaster is applied then lint spread with cerate then the pledgets of tow, then the tongets in a cervical form and secure them by a roller the tourniquet should be left on the leg loose after the Stump is dressed to be in readiness if hemorrhage shoud occurs. The patient is now put to bed with the Stump rested on a pillow.

Amputation of the thigh

The instruments necessary for performing this operation are nearly the same as those of the former only the collin is not crooked nor the retractor only a piece of flit in the middle. The operation is to be made as low down as possible but so that none of the diseased parts are cut. After making an incision through the skin dissect the integuments as in the former operation and divide the muscles down to the bone. This done apply the retractor and saw the bone after trepaning it take up all the large arteries and large veins in old people the arteries are sometimes ossified I then pass a needle round some portion of the muscles including them in a ligature. The better to prevent hemorrhagia all the other process are like what I have described in the leg.

Bronchotomy

Sometimes a swelling or obstruction of the aspera arteria takes place to such a degree that an operation becomes necessary.

The Operation is performed between the thyroid and cricoid cartilage. first make a longitudinal incision down to the cartilage, and then puncture the trachea with the point of a knife and introduce a silver canula which is to be secured in its situation by means of tapes passed through the holes in the bowl of the canula and round the neck of the patient. this is a very easy and safe operation, no vessels are in the way to create Hemorrhage —

Ascites

This is a collection of water in the cavity of the abdomen for which it is necessary to perform the operation called Paracentesis the operation is generally performed in the left side about half way between the superior anterior spinous process and the navel. the Left side is preferred for the purpose of avoiding the Liver. the celebrated Abr Cline in performing the operation wounded the Epigastric artery and the patient was suffered to die from hemorrhagia. I say suffered because he aught to have cut down to the bleeding vessel and secured it. this make him suspicious of operating in the side we therefore proposed to make an incision about half way between the Pelvis and navel.

Notwithstanding the tendinous part than is perforated however contrary it may seem to theory heals up as well as another part. the urine should always first be evacuated. this operation is generally performed with a trochar, the stilleto of which some Surgeons have made flat. this may be very inconvenient and require a great deal of force to push the canula into the belly. other have the stilleto triangular. it is of great consequence to ascertain whether the tumor be really a collection or not if it contains water it may generally be told by the fluctuation.

An actress who has been several times tapped for ascites, believed herself affected with a return of the

Anevrism

An anevrism is a morbid dilatation of the heart or of some of the arterial system.

Anevrisms are divided into true and false, the true are such as are already described and are attended with no wound or division of the Cutis

The false are such as occur from accident independent of any disease of the arteries. I shall confine myself particularly to true anevrism. There is a greater tendency to anevrism in one part than another. They may occur in the Aorta and in different parts of the body at the same time, but are mostly confined to one part of the arterial system only which yelding to the momentum of blood grow weaker and weaker and at last burst.

The prominate cause of anevrism is a disproportion between the momentum of blood and the power of the artery of the remote causes of anevrism we know but little. drinking ardent spirit to excess is said to be one cause. it is said by some than violent strains lay a foundation for anevrism.

I have twice seen false anevrism in the ham from contusion. it likewise has been said than anevrism has been caused by bleeding in consequence of the lancet passing through

the veins and dividing or incising the outer coat of the artery leaving it too weak to resist the momentum of the blood.

To ascertain this Mr Hunter lay bare the carotid artery of a dog he then dissected away the coat of the artery one after another till he came to the internal polished coat. the wound was then tied up and the dog left to himself. about three weeks afterward the dog was killed the artery was examined and found to be of the natural size, not having dilated in any size the coats were consolidated to the side of the artery and got well:

the circumstances which lay the foundation for anevrism is a diseased state of the artery but there is likewise a roughning of the internal coat which at time become ossified.

Anevrism occur less frequently it is said in women than in men I have however seen several cases of anevrism in women. they occur most frequently in young people, it is of the greatest consequence to distinguish between anevrisms and tumors of any other kind, though the difference is obscure and not often to be perceived especially in old anevrisms, in recent anevris-ms the pulsation is soft, but often sometimes when the swelling and tenseness are much increased pulling the parts on the stretch and the coagula is formed, the pulse beco-mes obliterated because the stroke of the heart has to be continued through the coagula to the finger touching, in all recent cases can remove the blood contained in the

swelling by pressure made for sometimes over the part though it will soon return when the pressure is taken off.

Whereas a tumor remains immoveable. a Tumor may be formed on an artery or so situated as to partake of the pulsation and in than respect resemble an aneurism. but we can place our finger behind it so as to pull it off the artery and the pulsation cease. even when we cannot raise the tumor of the Artery we are still enabled to distinguish it from an aneurism by the particular pulsation. for when a tumor is situated on an artery we are sensible of the whole body moving.

When the dilatation takes place in the thorax it is known by a palpitation of the heart and difficulty of breathing. When the dilatation of an artery has commenced the progress is much slower than we would suppose because the impetus of the blood as the artery dilates is divided over a large surface. it does not advance all at once; but increases gradually coagula forming as the sac distend. the aneurism bag as it enlarge and contract adheres to the part around it and the internal parts wear away to a great size. the Dilatation of the artery commonly takes place on than side which is most remote from the Heart or on than on which the impetus of the blood is greatest though some times they are equally dilated. the pressure they occasion frequently causes the absorption of the coagula or perhaps a portion of the surrounding part, in this manner is gon

on untill it arrives at the skin when it burst and the patient dies of a sudden gush of blood. in

In an aneurismal sack there will be formed a number of coagula or lamina the general indication in the treatment of aneurism is to lessen the quantity of blood in the trunk of the arteries. rest and low diet are also necessary, bandages have been likewise applied and are said to have performed cures.

I shall speak chiefly of popletical aneurism at first there is no pain but only a pulsating tumor, which enlarges till it produces pain from pressing the large nerve on the stretch.

The surest method of curing aneurism is to tie up the artery. the mode of performing this operation some years ago was to make an opening into the aneurismal sac. while the tourniquet was secured tight on the upper part of the thigh and after discharging the blood to tie up the artery just above the sac. but this is frequently unsafe on account of the diseased state of the artery which will would be liklely to burst at the place were it was tied. to remedy this Mr Hunter proposed to take up the artery about half way between the knees and the anterior spinous process of the illium; also than he might avoid the hemorrhage than frequently

occured from the diseased and ossified state of the artery which will not allow the sides to unite.

The Limb will be nourished by the anastomosing branches. it however happen that they are not sufficient for the support of the limb and mortification ensue. this I suppose is not owing to any want of sufficiently of anastomosing branches but to the tenseness and pressure of the swelling obstructing the circulation.

I saw one case of this kind but I supposed that it was owing to the Tumor preventing the circulation in the anastomosing branches.

in proceeding to perform this operation, first have a tourniquet fixed to the upper part of the thigh but not too light, allowing the artery to pulsate then making an incision about four inches in length longitudinally in the course of the fibula down the Sartorius muscle and dissect along the lower edge of it. it is necessary to pay particular attention to this for if you go above the Sartorius muscle you may cut down to the bone and not find the artery. after you have dissected through the Skin and cellular substance feel with your finger for the pulsation of the artery. it is best to use the handle of a knife to expose the artery. as there is great many anastomosing branches which would probably be wounded

by the sharp edge of the scalpel. there is a thin facia before you come to the artery, through which you must scratch with the point of the knife a little to one side of the artery to avoid wounding it. after the artery is brought into view it may be taken up either by means of a silver bodkin or as Mr Carbutnot advise by passing a couple of ligatures round it at about half an inch from each other. and then separate the artery between the Ligatures by which means he says the ligatures come away sooner. the Artery is divided then take off the tension. I have seen the ends recede 1/4 of an inch from each other when divided. in which every way it is performed the ends of the ligatures are to be brought out side of the wound and a pledget applied so as to press the bottom of the wound close together, that the outside may not heal too soon and thereby form an abcess. I have seen an abcess formed from this cause that extended from the knee to the anterior superior spinous process of the Ilium.

The aneurismal tumors after this treatment disappears. this is sometimes however not the case and the tumor goes on to suppuration. if the tumor after it has suppurated does not open itself, by an ulcerative process it should be opened by an incision, when this is

is neglected very serious consequence sometimes occurs.

I once know it produce an abcess of the knee joint and the patient died.

When the artery burst and allows the blood to flow in the cellular texture the pulsation may be perceived at first but the blood stagnating then soon coagulates and the swelling and tension prevent any pulsation being felt and then it is impossible to say whether it is an abcess or aneurism. When this occur. we should apply the tourniquet a make a puncture in it. if it be an abcess the matter will be allowed to flow out; if it be an aneurism it must be tied up.

When the tension is great, part of the coagula should be scooped out of the puncture to relieve the tension. in 8 or 10 days the tumor will have suppurated and the extravased blood will have come away.

Fistula in Ano

this is cancerous ulcer situated in the viccinity of the anus. it frequently consist of one, two, or more cells and is caused by infl=amation. if the parts are generally inflammed and violent tume=faction take place during the bearing down pains, and not infrequently produces suppression of urine. when it arrives at so great height it generally terminate in suppuration forming an abcess, making an opening externally or into the rectum or both. if it communicates both externally and internally it is termed a complete fistula and if it communicates with the rectum only it is called blind or occult fistula.

to examine well the part the patient should lean over a table and the surgeon having his finger well oiled should introduce it into the rectum and insert a probe, the fistula is complete into the abcess. if you can feel the point of the probe, the fistula is complete but if it be incomplete you will not be able to feel the point of the probe.

Sometimes the abcess is small resembling a bile and is easily cured. Sometimes the side of the rectum is separated and stretched from the buttocks to a very great extent raising over the brim of the pelvis.

the causes than occasion these abcess are such as occa=sion inflammation in any other part of the body.

False Anevrism

There are two kinds of anevrism (false) both occurring from wounds in the artery. one occurs from bleeding in consequence of the lancet puncturing through the vein into the artery and letting the blood flow from the artery into the vein this form was it is called varicose anevrism. it may be told by a thrilling sensation which is very distinguishable. a hissing noise may be heard by applying the ear close to the orifice.

Sometimes the two orifices does not exactly correspond with each other and the blood instead of flowing into the vein escape into the cellular membrane and form a tense anevrismal pouch communicating with both the artery & vein causing great pain to the patient. and if an operation is not performed the skin becomes tense and burst or slough away, bleeding profusely and exposing the patient to great danger.

The varicose anevrism is free from danger and therefore no operation should be performed. the only inconvenience arising from it is a little deformity caused by the dilatation of the vein at that place. but when the blood escape into the cellular sub=stance an operation become necessary. the artery and vein should both be secured above and below the sack.

The varicose anevrism does not requires an operation in general yet some of their modifications do.

we should examine very carefully in all cases of pains in the region of the anus to discover whether it originates from piles if not so, the remedies should be used to prevent suppuration

When we are consulted by a patient concerning pains situated in the region of the anus we should however disagreeable it may be either to the patient or ourselves always examine into the real nature of the complaint.

When inflamation and swelling are found our first endeavour should be to prevent suppuration, blood should be drawn according to the nature of the case and the constitution of the patient, purging leeching, bread and milk poultice &c these remedies are generally sufficient to remove changuery, if not the warm bath should be tried.

Sometimes these remedies all fail and the tumor increases to such a size as to occasion a total suppression of the urine, a catheter should then be introduced for the relief of the patient which may be left in a considerable lenght of time without any bad consequences resulting from it. the catheter should be made of gum Elastic which can adapt itself to the shape of the part and will be worn with much more ease than a Silver one. Sometimes inflammation comes on with a disposition to gangrene. on this subject I would advise you to read Pott. though I would advise you from the success I have had in such cases, in the case of Blisters to apply

them in similar circumstances. if the Surgeon is called in early he may generally resolve the inflammation, but unfortunately we seldom see those cases untill suppuration has taken place when an operation is necessary for a cure.

In all cases where there is a collection of matter we should make an opening in the most proeminent part and not wait for it to open naturally.

In all cases we should enjoin the antiphlogistic regimen till inflammation subside.

I shall proceed to mention the circumstances which render it difficult to perform a cure without a surgical operation.

first when the fistula is complete the formation of pus keep its sides distended and prevents its healing. and next in addition to this the ulceration of its sides prevent its healing. if the orifice is small so that the matter cannot readily flow out it collect in the cavity and the granulation cannot come in contact

2 the suppurating cavity is prevented from healing by the external orifice closing too soon and here the patient think himself getting well but his hopes are soon disapointed for the matter either has to force its way out again or make a new opening

3 when the fistula is complete fæces are forced into the opening and are pressed out of the external orifice

when he goes to stool.

When occult the matter forces its way into the rectum and discharged in that way but it is frequently obstructed by the feces though in most cases the opening goes obliquely downward and when the patient goes to stool the feces will close up the orifice but I have seen cases where the orifice opened upward into the rectum, and when ever feces was voided would get into the abces and distend it very much causing great pain and distress to the Patient

4. When nature is unequal to a cure without the assistance of a Surgeon, at first where the cavity is on one side of the sphincter and the patient goes to stool, the contraction of the vessels will draw the dilated sides from its natural situation destroying all the newly formed granulations and prevent a cure.

5th another obstruction to a cure is where the Patient goes to stool, the gut is somewhat protruded and the adhesion than may have taken place in its contracted state are destroyed. it is to this cause that the small portion of blood which appears after stool.

6 When owing to some causes or other the healing of the fistulae has been prevented for sometimes the parts become callous as was before explained and such callosity happens.

7. When the extent of the fistula is raised a considerable way into the Pelvis and even to the upper part of the Perin accompanied with branches, nature seldom effect a cure and even the art of the best Surgeon often fail.

8. The general Health of the Patient, this should be attended to, as it will assist greatly in the cure.

Operation of Fistula in Ano.

This consist in dividing upon the finger the detached gut, because

1st its being cut prevent its acting so as to injure the granulation

2 the fæces can pass readily out without projecting the rectum.

for Information of the particular manner of performing the Operation I would advise you to read Pott. my object has been to shew the principles upon which the healing is affected. although I shall make some remarks upon the mode of operating, When the fistula is complete. the Patient is to lean over the table then the Surgeon after oiling his finger is to introduce it into the anus, then introduce a bistoury through the fistulous cavity till it

comes in contact with the finger., drawn way the finger & bis-toury together and the bistoury divides all the parts between the opening (at which it was inserted into the rectum) and the external end of the rectum. it divide the Sphincter and rectum from its upper communication to its extremity.

For the introduction of the instrument the patient feel a good deal of pain from the edge of it cutting as it is inserted to remedy this I have a silver cap which goes on the Edge of the bistoury and extend along one side till it goes to the handle, being a little wider than the blade which secures the edges. When the bistoury is introduced by pushing a little knob at the end of the cap it fall off and leaves the edge exposed. another method when a silver cap is not at hand is to place a piece of wapen linen on the edge this should be long enough to reach to the end of the handle so that when the bistoury is introduced we can draw away the linen and divide the parts. this mode answers very well. sometimes the opening in the rectum is so low down that we can pass a director in the rectum from the abcess and out of the anus in this case the parts may be divided by a Scapel, but when the fistula is so high up that to divide the parts with a bistoury might endanger the arteries and hemorhage ensue, in this case we should pass a ligature through it and bring it out at the anus and tied it thought

not so tight as to cause great pains. this will avoid the hemor=rhagia and the parts within the Ligature will be divided by ulceration or absorption.

the wound occasioned by the Ligature will heal nearly as fast as the ulceration goes on, so than by the time the ligature has cut through the wound will be nearly hea=led up though sometimes it does not heal so fast.

Hair Lip

I shall now make few remark on the Hair lip which derives its name from its ressemblance to the lip of the animal. it mostly takes place in the upper lip and is but one slip though sometimes it is divided in two places. they are most frequently born with us though they some=times happen from accident.

when they occur at birth the suture uniting the maxillary bones together is at times not very well consolida=ted owing to the want of the gentle pressure of the lip in such cases the lip should be united immediately. in proceeding to do this we should have a pair of sharp strong scissors which are the most convenient and cut a piece of each slit taking care to cut out the upper angle or else the lip however well united below will not heal above

this piece cut out somewhat resembles the letter V after this is done, the edges are drawn exactly together and secured by two silver pins ~~by the twisted suture~~, allways taking off the points of the pinns after they are introduced to avoid hurting the Patient.

this is specially necessary in children, the Pins should be left in about four days when the may be withdrawn this can be done by taking hold of the end with a paire of nipp~~ers~~as as the pins will hold pretty fast. lay your fin=gers on the tread when you withdrawn the Pins to prevent pulling it off.

the tread may be left for two or three days longer by which time it will be perfectly well. the thread will be agglutinated to the parts by means of the mucus of the nose.

Strictures of the Urethra

by the term Stricture is meant the diminution of any canal at a particular part. When they occur in the urether it most commonly happen at the bulb., though they sometimes take place at the middle of the urether, and sometimes beyong the bulb at the membraneous part of the urether though rarely.

They are of two kinds spasmodic & permanent though these two kinds are not frequently combined

The 1st effect of a Stricture in the urether is to decrease or lessen the flow of urine and often times the patient does not suspect any disease untill in the voiding of urine. he find it pass drops by drops. he will have now frequent treats to make water passing but a little at a time and this not without considera=ble straining

A gleet in general attends its owing to the straining and irritation there is in passing urine. the parts situated between the bladder and stricture become very much dilated and the other parts diminishing, resembling in its effect a string tied round the penis.

the Stricture most commonly runs regularly round the urether but not always. for it is sometimes found on one side only. Whereas Spasm supervene in such strictures the passage is completly closed. the causes are cold weather, cold

Structures of the Urethra

by the term obliterans is meant the constriction of any canal or particular part. When they occur in the urethra it most commonly happens at the bulb. Though they sometimes take place at the meatus of the urethra, and sometimes happen in the bulb of the membranous part of the urethra through disease.

The cure of this kind of stricture is permanent.

Some obliterations are not completely impervious.

The effect of a stricture in the urethra is to decrease or lessen the flow of urine, and often times the patient does not discover any obstruction until the voiding of urine. In this case there will have now frequent recourse to the urinal, passing but a little at a time, and the act painful and straining.

Later in general attends its arrival to the attaining our maturity, as in passing urine. The parts situated between the bladder and structure become very much irritated and the effect produces disturbing, painful, as it affect a strong effort towards the part.

The obliterations most commonly occur immediately behind the meatus, but not always, for it sometimes found on one side only. Inferior objects disappearance in strict obliteration the passage is completely closed. The cause are cold weather, cold

feel and the intemperance of strong drink.

I had a patient in whom it was caused by coition from too long a retention of the Semen. The greatest difficulty there is in ascertaining the causes, is the reason why the suppression is generally not treated with success for the stricture when not.

Venereal disease is sometimes the causes of it.

Treatment

The permanent stricture may be dilated in common by a bougie. much depends upon the preparation of Bougies and upon their make.

I in general use wrapped linen. pieces of fine linen dipped in pure wax and rolled up smoothly make the best bougies. the point must be small but the body sufficiently stiff the force necessary for introducing it. the bougie may be introduced as far as it will enter and left for sometimes with its point in contact with the stricture till the irritation has subsided and then press it gently forward by which means the stricture will frequently over come

Commonly when the bougie is introduced the patient will faint and cold sweat will break out of him,

this seldom happens after the third introduction of the bougie, when the stricture is small it may then dilated at times strictures occur in which the part is so closed

as not to admit the point of the bougie. in such cases we some times succeed in letting the patient pass a bougie down to the stricture for the space of an hour or two every day. sometimes the canal is thrown to one side making the passage irregular; when this occur the point of the bougie is to be bent to one side and the introduced.

Sometimes the pressure and irritation of urine accumulate in the part occasione ulceration of some of the parts behind the stricture, forming an artificial opening called fistula in perineo. in such case there are two modes of relief either by caustic or by the lancet. caustic was first used by Mr Hunter and afterward by Mr Home. I have used it myself in several cases with very good effect, the caustic is rolled up in the end of the bougie and tied by a fine thread. the end of the caustic may project a little to prevent the caustic burning the canal before it got to the stricture a small cap of waxed linen secured to a very fine thread fixed to the end of it answer very well. when the bougie is passed down to the stricture the cap may be withdrawn by means of the thread.

When the stricture is not at the bulb of the urethra or before, it may be divided by the lancet defended by a silver canula. the dis tention of the urethra behind the stricture

Stricture makes it impossible to divide any other than the Strictured part. When the canula is introduced to the Stricture the lancet may be pushed through it and it will be divided. but the circumstance of the curvation of the urethra makes it difficult to divide it from the back and the curved canula answer very well in some case.

When the Stricture is dilated a bougie or Cathete should be introduced and kept in for several days., when if there be fistula in perineo it will be held up in few days.

In Spasmodic Strictures to treat it with caustics is hurtfull. the warm bath or a small roll of tabacco, or the end of a bougie introduced to be in contact with the Stricture will frequently relieve it; or an anodine Clister. V.S. laudanum or Emetics have proved serviceable.

Cancerous Breast

When tumors are formed in the Breast if they do not yield to the Antiphlogistic regimen or treatment with the use of Mercury it is best to extract them early.

There are two methods of extracting them.

1st by caustic

2 By the Knife

the last methods is the best are we are able to distinguish better betwen the sound and diseased parts. this may be done by an incision make directly over the middle of the breast, if the integu=ments been sound, but if are ulcerated or even induration has taken place or in any place of the Skin it will be necessary to make two incisions so than the indurated part may be embra=ced betwen them and removed.

if the glands in axilla are affected by the tumors we must continue the incision in the course of the Lymphatics to the tumified gland or glands in the axilla and remove the glands and indurated Lymphatics with the tumor..

it is often difficult to get at the glands from their diffi=cult situation in the axilla. but the weight of the tumor if it be large will bring them down than you will be enabled to get your finger above them to tied a ligature round

which should always be done before they are separated on account of the many vessels of that part.

When the tumor is taken out the edges of the wound are to be brought together and secured by adhesive plaster than they may unite by the first intention.

Abces of the hip Joint

The first symptoms or indication of the disease in the child (it generally happens in Children about 12 years of age) the patient refuses to walk or step.

It is mostly attended with pain from the commencement but this. However does not always attend and when it is concomitant, it is often deceitful occuring not in the hip but in the knee that very frequently deceives the patient and often the Physician is so deceived as to apply substances to the knee instead of applying them to the hip.

Pains when it is not constant but comes on at intervals and continue for an hour or two and then cease. it is often worse at night. after the disease has existed for some times a swelling and enlargement of the hips and adjacent soft parts take place. at this period pressure or touching of the part

give pain. If the patient stand up he always stand on his sound side, bearing no weight on the diseased limb but bends the knee of the diseased side forward and toes only rest on the floor.

This disease of the hip joint is often taken for a disease of the spine, by laying the patient on his back on a table; for if only the hip be diseased you can easily stretch the patient and if it is the spine the pelvis will not vary.

Causes – it frequently comes on without any apparent causes but often it occurs from blow on the hip or jumping after some times as the disease progresses we frequently find the limb shortened, this take place in consequence of the bone being pushed out of the acetabulum, by tumor forming in the socket. and the head of the bone is drawn upward by the action of the Muscles on the dorsum of the Ilium. this circumstance of luxation by means of disease of the joint has given rise to the term of spontaneous luxation. In common the luxation is upward and backward, but sometimes it takes place downward and forward and from the force of gravity a relaxation of the muscle take place. Sooner or later suppuration take place and the bone is found in a carious state. Suppuration does not always take place for it has happened that a new acetabulum has been formed which would allow of some motion of the Limb. When suppuration takes place it is attended

with more or less pain and matter which is formed is discharged by one or more opening. in this state the patient frequently loose his appetite, he becomes more emaciated has night sweats and hetic fevers seldom ensues. in the progress of the disease the thigh dwindles away very much becoming much smaller than usual. in some cases the shortening of the limb does not take place for the head of the bone become diseased as well as the acetabulum. and form an anchylosis with the socket sometimes the head of the bone is wholly removed and then if you examine you can pass a probe through into the pelvis.

Treatment

Unfrequently we are not often called in the forming state of the disease, I say unfortunately for if we are called in early, the disease might be sometimes counteracted. When called to a patient in those symptoms.

1st Bleeding

& purge every other day for two or three months the best remedies for this purpose that I have found is Jalap and cream tartar, it should be given to produce 4 or five evacuations daily. you would suppose these children could not bare such a severe regimen

but experience proves that they can bear it very well.

It is always necessary to prevent all motion. The patient should be put upon a vegetable diet after this a warm bath may be used. I think it is more beneficial when impregnated with the muriate of soda or some neutral salt.

I have used salt brine once a twice a week

I have mentioned the tumefaction of the lips because it is from this circumstance that the epidence of the disease is ascertained. The application of caustics on the lips is frequently advised but I have tried them in several cases and found them of no efficacy. The application of leeches to the part are often of service.